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THE SPHERE, FEBRUARY 27, 1943
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THE SPHERE

Vol. CLXXII No. 2249 WITH WHICH IS INCORPORATED THE GRAPHIC FEBRUARY 27 1943

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Volume CLXXII No. 2249 The SPHERE, London, February 27, 1943

THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly

AFTER THE GREAT EXPLOSION AT WILHELMSHAVEN ON THE NIGHT OF THURSDAY, FEBRUARY 11, when the Mariensiel Depot in the German naval base blew up during a "Thunderbolt" assault by a strong force of heavy R.A.F. bombers—*An Official Air Ministry Photograph*

On the night of February 11, one of our Halifax pilots reported a remarkable explosion while still over Wilhelmshaven, the great German naval base and U-boat centre. "It lit up the sky with a brilliant red glow," he said, "and seemed to spread for miles under the cloud bank before it died away. I should think we must have touched off a store of mines, or an arsenal or something pretty good." Photographs have now been obtained by R.A.F. reconnaissance aircraft which confirm the pilot's report in the most striking way. The ammunition depot at Mariensiel has been completely destroyed in the manner shown in the above picture. This depot contained naval ammunition, torpedoes and mines : it was the principal ammunition storage place at the great naval port, and it covered an area of approximately 150 acres. This is shown in the above view : the whole area is now devastated by the force of the explosion, and practically all the storage huts have been destroyed, their positions being marked by large craters. (The latter were caused by the detonation of the explosive materials within the huts.) To the top left-hand of the picture can be seen three oil storage tanks which have also sustained damage

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A WAR NEWSLETTER —No. 182

1, NEW OXFORD STREET, W.C.1.

Set-back in Tunisia.—The Americans have proved themselves in this war, in the air, on the sea and in the Far East, tough fighters, resourceful and quick to learn. In Tunisia they have taken a local set-back of some magnitude, and little Doctor Goebbels will not neglect so useful a seed in his dragon's-teeth campaign. Myself, I warmed to the frankness of admission of defeat put out by the War Department in the States. It augurs well. Americans respond terribly to Pearl Harbours, big or little, world-shaking or local, as their enemies know to their cost. The Nazi advance in the corridor (labelled "Rommel's," right or wrong) proves one thing clearly, if proof were needed. All armies have got to learn by experience the technique of North African armour-battles as now waged. Our memory is not so short that we have forgotten already all our yesterdays and our Tobruks and Knightsbridges. The Eighth Army has risen on stepping-stones of experience and failure to great triumphs and high morale, and the American African armies will get there quicker, because the difficulty of the technique is to-day commonly appreciated. There have been grievous losses of men and material. But war is expensive and destructive. Time may have been lost, too. On the coldest basis of calculation, loss of time is of greater importance. There is little doubt we are behind schedule. The dash for Tunis and Bizerta—a justifiable, a necessary gamble—failed. If we could have cleared the narrows of the Mediterranean *then*, the chances of the war being over this year would have been good, by calculations based on subsequent events in Russia. As things are, the assault on the under-belly cannot be exactly and psychologically timed with the Russian pursuit of Hitler's war-worn armies. It is the fortune of war which two British and one American armies will adjust with no more delay than weather and transport difficulties compel.

Gayda is Less Gay.—My old friend Gayda has come full circle. If I could find any spark of sympathy for the type of publicist who hounds on the dogs of war from a comfortable armchair in a sanctuary, and glories in the romance and pride of successful aggression and petty larceny, I could almost spare a tear for poor Gayda's latest wails of woe. He can offer to the heirs of Cæsar nothing but the 100-to-1 chance of continuing a show of resistance to the Allies just long enough to persuade them to accept something less than unconditional surrender; to leave the Italians their eyes to weep with. I have a file of Gayda's speeches dating from 1940 in his more exuberant manner. I wonder if he has a similar file. I should like much to send him mine. But I cannot bear to part with it. It is too pleasant a possession. I loathe war to the depths of my soul. I have a horror of tyrants, aggressors, murderers, thieves and traitors, and all the dogs of war. But the prize cur of them all is the instigator and receiver, who sits in security and hounds on the fighting dogs with fine phrases and rolling periods; who fights with ink and gall and insults and takes his punishment squealing. Such a cur is the once gay Gayda—Gayda now guyed.

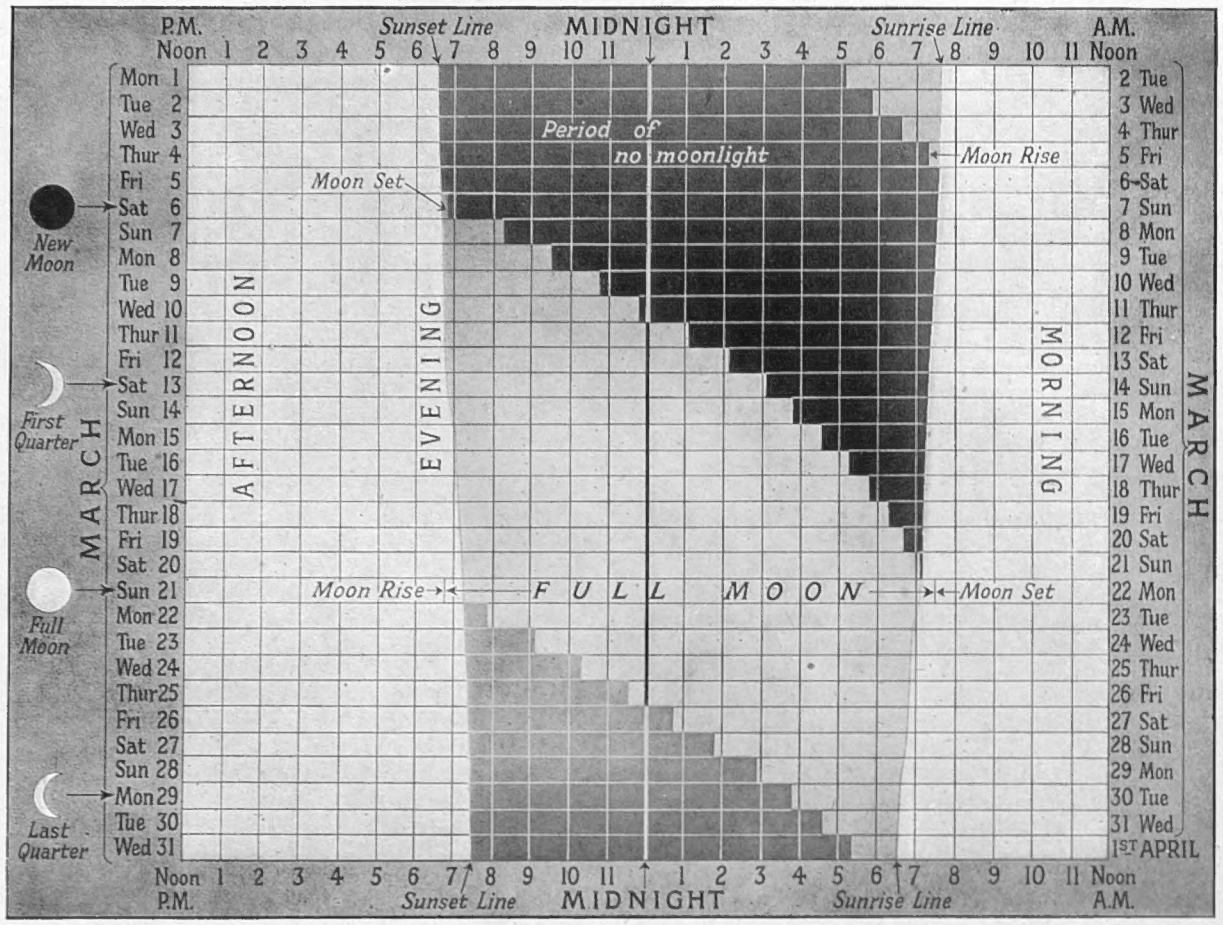
The Beveridge Report.—That the House of Commons could find time for three days' debate on a question of social security in the post-war period might well strike the Russians as queer, at this *psychological moment* when their slogan is, burningly, "First things first." There are sound arguments, however, against a charge of wasting with words time vital for action. You remember the general of legend who, having laid his final plans for assault, went off fishing. We believe that, now at last, the last words and talks and declarations and charters in the field of major strategy have been said and announced, and that our leaders of strategy have made their final plans and left the field of action clear to their commanders in the field. And, anyway, the Commons are mainly non-combatants. And, anyway, if they *have* gone fishing, they are angling for a very big trout, a whale. If there is something of anomaly, there is also something heartening, confident and even grand, in this constructive discussion on a measure of social security which is designed to pay a debt and to put something finer than a fool's-cap on years of fearful suffering and waste and lessons and experience. Yes, at the risk of a charge of talking when action cries out to be done, we *must* plan the peace while we strive to win the war. And, as we do it, one hopeful point stands out. Gone are the old party shibboleths, gone the sharp divisions. There is only Socialism, and the only political parties in the State to-day are sane Socialists and juggernauts. Conservative, Liberal, Labour, Independent, Common Wealth—these labels have no meaning at all, and never can again.

Is Silence Golden?—A correspondent begs me to stress the present danger that the Nazis' strenuous efforts to cause friction among the Allies by every means in their power may succeed to some extent through any failure of the Allied people to realise how subtle and strenuous these efforts now are. No doubt it is a real danger, and it should be constantly kept in mind. Myself, I think this propaganda is itself somewhat misled and muddled in Nazi minds. Britain and America still pin their faith in words, on declarations and slogans; we seem still to regard words as of equal importance with actions. Constant official pronouncements are part of the Charter of Democracy; and our insistence on freedom of speech often induces us to criticise each other too freely. These two phenomena, taken together, must often encourage the Nazis to believe that their dissension-sowing strategy is succeeding. The Nazis often take our official declarations as pure lying propaganda and bluff, and our Press criticisms of each other as naked truth. In fact, the reverse is more nearly the reality. Mr. Churchill's latest review in Parliament was received among the Democracies and Allies, and in many neutral countries, no doubt, as a wonderful tonic and faith-giver at an anxious time. Yet I feel convinced that the Nazi leaders were genuinely deceived, as usual, by that element of truth which is beyond their compass. It is, of course, arguable that another treatment of the famous Churchill-Roosevelt Conference might have worried the Nazis still more. Suppose that it had been in the nature of our Democracies to *say nothing whatever* directly about that meeting and its decisions, simply to allow the news of the meeting to "leak out," as it were, and neither to confirm nor to deny it officially. The Nazis would now know that Churchill and Roosevelt were in conference for ten days in North Africa with all their military advisers—all that was accomplished would be for them entirely guess-work. That would be the Axis method; that is Russia's method. It is not *our* method and it cannot be Democracy's method.

An Eton Bombshell.—I do not know who was (or were) the author (or authors) of the famous leader in the Eton *Chronicle* which "voiced a demand" that the school should be removed to more congenial surroundings. That the suggestion came as a bombshell upon the more conservative elements of the school authorities and Old Etonians, I take as certain; as a bombshell impiously and treacherously hurled. Move Eton from King Henry's holy shade? No doubt the article was too sudden, too trenchant. The way should have been smoothed by hint and innuendo. Eton stands on a miasmic marsh. Built upon a slough, it is hemmed in on the north-east by a man-made Slough of unexampled muddle and ugliness. In winter the playing-fields are often flooded, and always damp and misty, and in summer it is a magnet for electric disturbances and brooding sultriness. Man walks in a vain shadow. When you boil down the treasures of King Henry's holy shade to terms of reality, what in truth is precious artistically? A chapel, a school yard slightly disfigured by bombs, two or three inconvenient old houses, the approaches to the older playing-fields, now ruined by bombs. What else? Not the various buildings which house the boys; not irretrievably the fine modern buildings. As for the site (of a great school on a busy main road, narrow and congested) it has provided a scandal for decades. It is the false values we attach to legends which too often block sane progress and wise reconstruction. The hour has struck for wise reconstruction at Eton; every clock in the country has been striking it. If Eton sold out her marshes and established herself on high ground overlooking the South Downs, she would not only solve half her present anxious, domestic problems, but would be able to reduce her fees and retain her ideals. But I fancy the mists will win the day.

The Nazi Pimpernel.—"We seek him here, we seek him there." Is he in Heaven, is he in . . . Russia, That damned, elusive Pimperrommel? I can't say, I'm sure. He has a magic carpet, like the rest of the war leaders. In the last weeks, he has been sighted in Tunis, taking measures with Arnim; soon after, he was badly wounded down south by American bombers. In between he took two trips to Berlin, one for consultation with Hitler (who himself is dead as mutton) and one for hospital treatment. He has had one bad operation (in hospital) and one good one in the Tunisian corridor in a Tiger tank. And now he is conducting the planned advance to the west of the German armies of Russia. He is fortifying the Dnieper, the Rhine and the failing morale of the German people. He is the chief card in the Nazi pack and in the pack of the rumour-mongers of all the combatants. He is of the line of the heir of Louis Capet, of the Man-in-the-Iron-Mask, of Hector MacDonald and of K. of K. He is like the onion in the kitchen. His presence can be detected everywhere. I expect to hear of him dropping on Sutherlandshire in the course of the coming weeks, carrying Hitler's head on a charger and some quite reasonable peace terms. He is the finest "story" in the world. War and rumours of war!

THE OLD STAGER



"THE SPHERE" MOONLIGHT CHART FOR THE MONTH OF MARCH

The month starts with a period of no moonlight, with the new moon on the night of the 6th, when it sets just before 7 p.m. A week later, on the night of the 13th, the first-quarter stage is reached. The moon is at its full on the night of the 21st, when it will give its light throughout the whole of the night, after which the evenings get darker, with the last quarter on the night of the 29th

A limited number of these charts will be supplied free of charge on application to the Publisher, "The Sphere," Commonwealth House, 1, New Oxford Street, W.C.1, but 2½d. in stamps must be enclosed with the application

The RECORD of the 11TH HUSSARS

—First into Tobruk, Benghazi and Tripoli with the Eighth Army

ONE OF THE BENGHAZI ARMOURED CARS AND ITS CREW: From left to right—Trooper V. Gungell (of Devizes—Regular soldier); Trooper J. Azbuckel (of Croydon—Regular); and Trooper T. A. Z. Cox (of Blaenavon, Mon.—Civil Servant)

ANOTHER BENGHAZI CREW—Captain H. Patch, D.C.M. (of Yorkshire — Regular); Trooper O. Crispin (of Erith, Kent—Regular); Sergeant A. Lees (of Dudley—former railway clerk)

THE CREW OF CAR NO. 118878 AT BENGHAZI: Major J. Lawson, M.C. (of Yorkshire — Regular); Sergeant D. C. Callens (of Morden, Surrey — Regular); Lance-Corporal W. Martin (of the Irish Free State—Regular)

THE FIRST ARMOURED CAR TO ENTER TRIPOLI—NO. 118775: Sergeant Hugh Playfair Lyon, M.M. (of St. Austell, Cornwall—an engineer in civil life) Trooper A. Stonier (of Macclesfield—labourer); and Lieut. W. Wells-Co (of Lincoln—agricultural student)

ONE OF THE FIRST SIX CARS TO ENTER TRIPOLI: Trooper R. D. Jenner (of Bexley Heath—manager to a tailor's outfitter); Trooper T. Vennell (of Birmingham—machinist); Corporal J. Markham (of Whitton, Middlesex—plumber)

ANOTHER OF THE TRIPOLI CARS: Trooper D. R. Jones (of Briton Ferry — commercial traveller); Captain R. R. Lockett (of Chester—of independent means); and Trooper S. Oliver (of King's Cross, London)

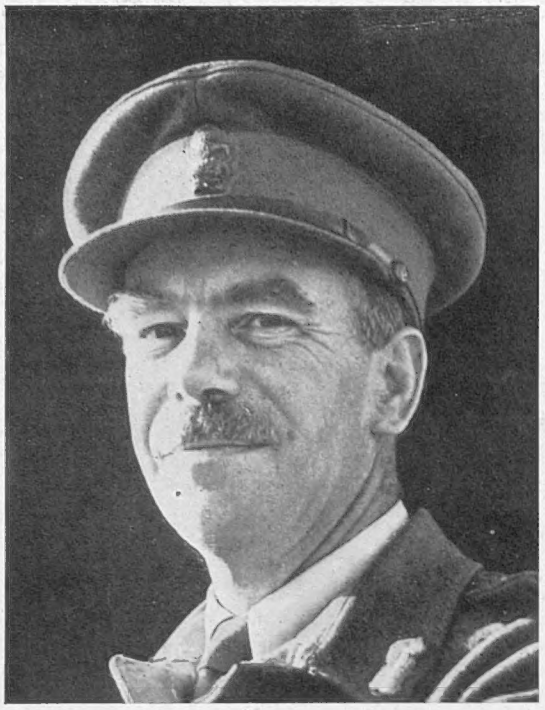
A famous British regiment now in North Africa—the 11th Hussars—claims a triple crown by being the first British troops to enter the three principal towns in Libya—Tobruk, Benghazi and Tripoli. When approaching the last-named, on January 22, they had tried all day to penetrate the enemy's last line of defence to the south. In the evening infantry and sappers succeeded in making a way over the anti-tank ditch, clearing enough mines for the vehicles to proceed. From Castel Benito, six miles away, a signal was received that the enemy had gone. The six armoured cars of the 11th Hussars proceeded down the road, expecting every moment to be ambushed, or to strike a mine. But they were unhindered. It was almost unbelievable after having travelled from Alamein under constant enemy fire. At 4.30 in the morning the six armoured cars slid quietly in single file down the deserted moonlit streets into Tripoli. No one was there to greet them: no shot was fired. The 11th Hussars had occupied Tripoli!

MONTGOMERY'S MEN

The Staff Officers of the Eighth Army

General Montgomery—"Monty" to every man in his Army—has built up a staff around himself who work in perfect harmony. He has given a lot of credit for the recent successes in Libya and Tripolitania to the men of this "team," who have served him so faithfully, but whose names are but little known to the general public here

CHIEF ANTI-AIRCRAFT GUNNER (known as the "Brigadier A.-A.") is Brigadier E. G. Campbell. He is seen here with a member of his personal staff—a refugee from the enemy!



CHIEF ADMINISTRATIVE OFFICER, known as the D.A. and Q.M.G. (Deputy Assistant and Quarter Master-General), Brigadier Sir B. H. Robertson, Bart., C.B., D.S.O., M.C.—from Durban, South Africa

CHIEF ENGINEER, Brigadier F. H. Kisch, C.B., D.S.O., O.B.E.: He comes from Clifton, but in recent years has lived on Mount Carmel in Palestine. He is examining a German "S" mine

CHIEF GUNNER OF THE EIGHTH ARMY: Brigadier S. C. Kirkman, M.C., O.B.E., the B.R.A. (Brigadier, Royal Artillery), comes from Bedford. All artillery is under his command

CHIEF TANK ADVISER: Brigadier R. H. B. Arkwright, known as the "Brigadier A.F.V." (Armoured Fighting Vehicles) who comes from Stalbridge, in Worcestershire

CHIEF SIGNAL OFFICER, Brigadier C. M. F. White, D.S.O., O.B.E., who comes from Framfield, Sussex. He is responsible for all communications throughout the battle area

CHIEF INTELLIGENCE OFFICER: Lieut.-Colonel E. T. Williams, known as G.S.O.1 (General Staff Officer 1), who comes from Oxford. In civil life he is a University Don

THE CHIEF OPERATIONAL OFFICER (G.S.O.1—Ops) is Lieut.-Colonel C. L. Richardson, whose home is in London. His job is concerned with operational planning

GENERAL MONTGOMERY'S MILITARY SECRETARY, Major C. A. R. Coghill, from Market Drayton, the General's right-hand man in all matters relating to the Eighth Army

NAVAL LIAISON OFFICER : Commander T. L. Brett, R.N., from Tetten Hall, Staffs. He is known as the R.N.L.O., and has his own wireless set, by means of which he keeps in direct contact with the Naval C.-in-C.

MEDICAL OFFICER : Captain G. C. Smith, R.A.M.C., who studied at St. George's Hospital, London, and who comes from Hull. He looks after the health of the H.Q. Staff

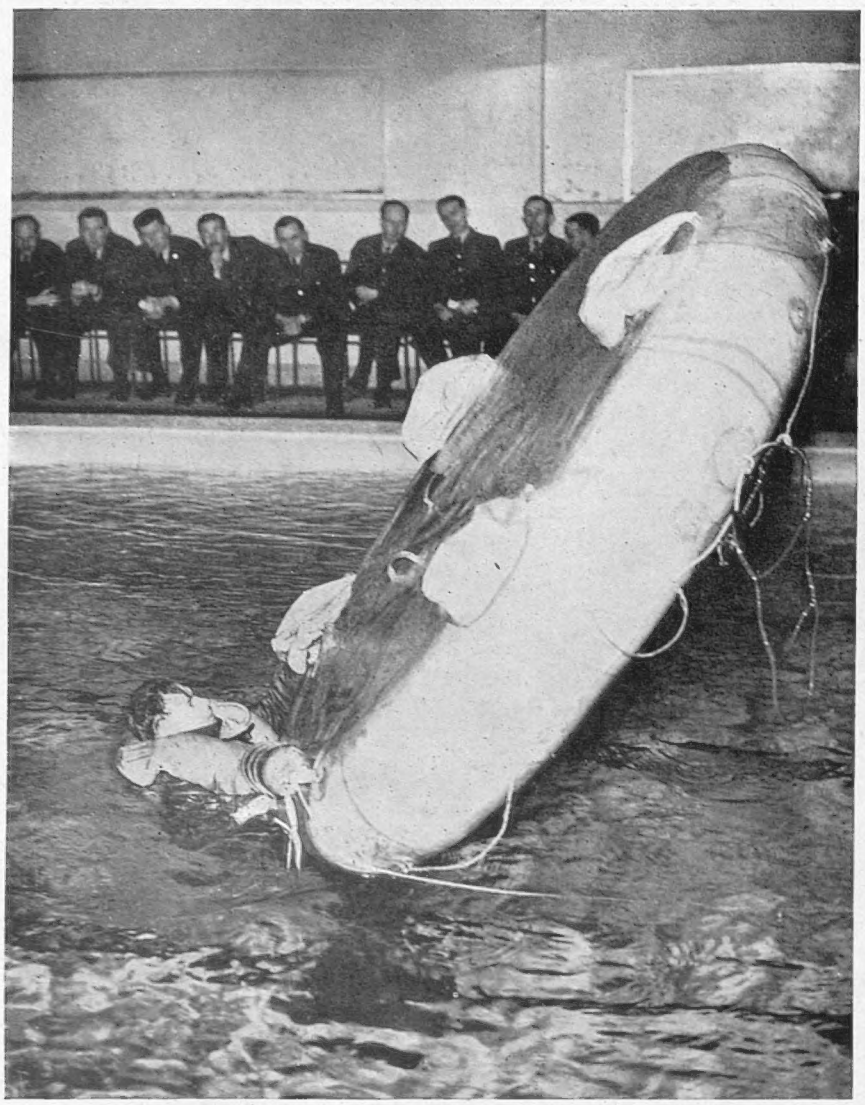
ALLIED AIR OFFICERS AT A MEETING IN TRIPOLITANIA : Air Vice-Marshal Sir Arthur Coningham (formerly A.O.C., Western Desert, and now in Tunisia) recently addressed a meeting of Staff Officers, Squadron Leaders and Flight Commanders who led the air striking forces during the winter campaign of the Eighth Army in Libya and Tripolitania. The meeting was held at the Castel Benito airfield at Tripoli

ALLIED AIR CHIEFS MEET IN TRIPOLI. R.A.F. and U.S. high-ranking officers met at Castel Benito recently for conferences. *On left*—Air Vice-Marshal Coningham talking to an American officer; *In centre*—Sir Arthur Coningham, General Carl Spaatz (U.S. — centre) and Air Chief-Marshal Sir Arthur Tedder; *On right*—Sir Arthur Coningham with Air Vice-Marshal Sir Keith Park (in charge of the R.A.F., Malta)

AIR CHIEF-MARSHAL SIR CHARLES PORTAL VISITS THE R.A.F. AT MALTA. During his visit to the Malta Stations, he talked to fighter and bomber pilots and ground crews, to Naval Squadron personnel and members of the Air-Sea Rescue Sections. He is seen here after stopping his car to get out and thank a truckload of soldiers who are helping the R.A.F. to keep their planes in the air

A.O.C., MEDITERRANEAN, Air Vice-Marshal Sir Keith Park, who sees everything for himself. He is familiar with every detail of the organisation on Malta. During a recent tour of inspection he met the men who are responsible for the safe delivery of the bombs—and the men who made that delivery possible

NEW PICTURES of the R.A.F. at WORK



R.A.F. PILOTS UNDERGO DINGHY TRAINING: A demonstration of how to turn a dinghy right way up in the water. All R.A.F. pilots now have to undergo a swimming course before they are taught to fly. The first swimming-bath has been commandeered for this purpose, and also to instruct pilots-to-be in the handling of their collapsible rubber craft in the water. The three pictures reproduced here were taken a few days ago in the baths, when demonstrations were carried out before high-ranking R.A.F. officers

A COMPLETE BOMBER CREW OF SEVEN IN THEIR DINGHY, demonstrating to a class of officers the correct manner in which it should be handled

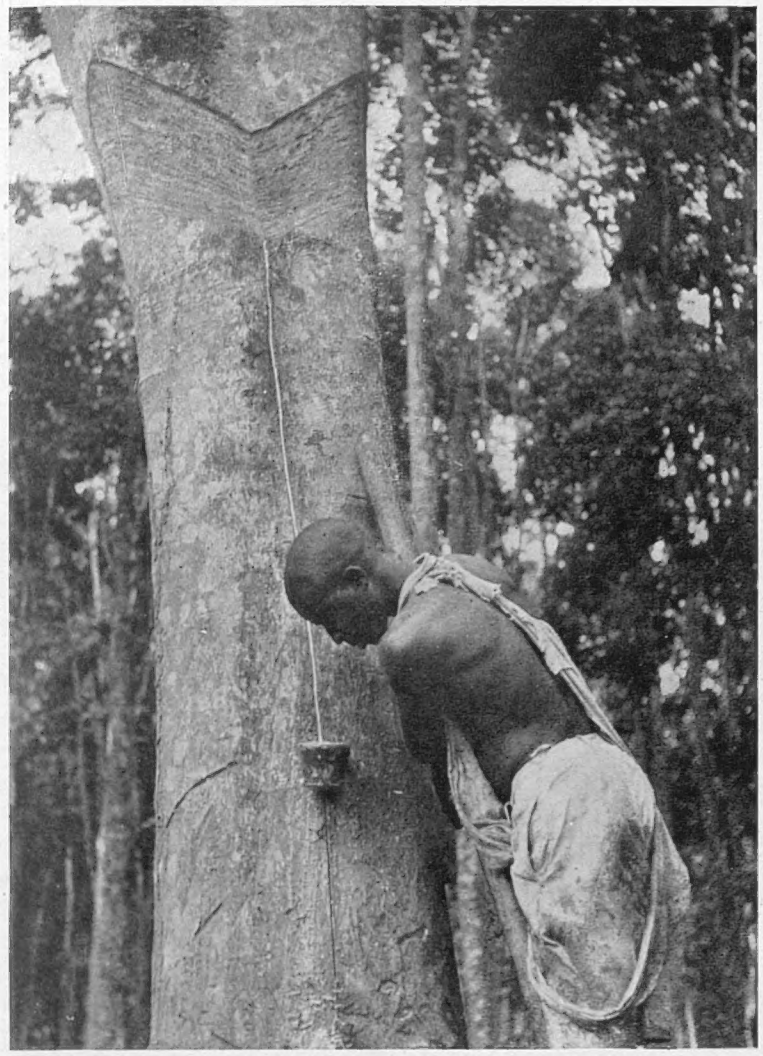
FIGHTER PILOTS' DINGHIES, small as they are, are now supplied with a sail. The mast is collapsible, and it is secured to the two sides of the dinghy in a most ingenious manner

A BOMBER GROUP CHIEF HEARS THEIR STORIES from crews just back from L'Orient. Air Vice-Marshal W. A. Coryton, C.B., M.V.O., D.F.C., Air Officer Commanding a Bomber Group, was at a Station under his command to welcome Lancaster crews returning from the heavy attack on L'Orient on the night of February 13-14. This picture shows him (standing, centre, at back) with some of the men who helped to drop more than 1,000 tons of bombs on the U-boat base. The seated figure on the Air Vice-Marshal's right is the Intelligence Officer of the station

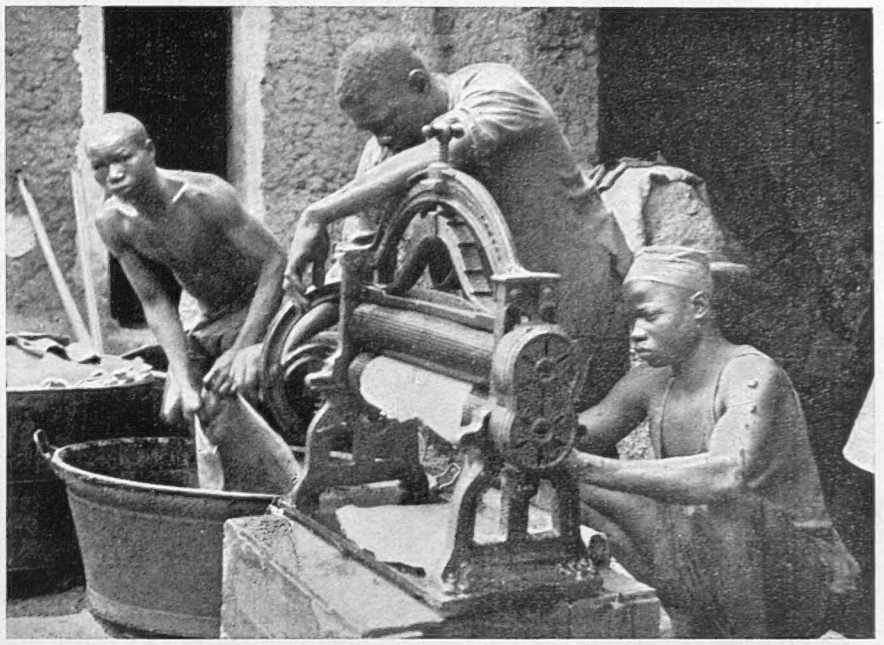
AFTER THE RAID ON L'ORIENT, Lancaster crews dropped a full load over Milan on Sunday, February 14. This crew already have a great number of raids to their credit—recorded by markings painted on the nose of their plane

SAFE BACK FROM MILAN after the raid on Sunday, February 14. Crews from the participating Lancasters compare notes on their return outside the airfield headquarters. Conditions were perfect for the bomb-aimers

PICTURES FROM THE WEST AFRICAN BATTLE ZONES



RUBBER FROM THE AFRICAN FORESTS: Latex flowing down the trunk of a newly-tapped tree into a small receptacle. Leaves are used in most parts of Ashanti to catch the latex as it flows down the tree, and calabashes or old kerosene tins take the place of buckets



RUBBER BEING PASSED THROUGH A HAND-OPERATED ROLLING MACHINE which converts it into a thin sheet bearing a ribbed pattern. The dense forests of Ashanti, in the Gold Coast, have become an important factor in the effort to replace rubber supplies lost to the Allied Nations when the Japanese captured Malaya and the Dutch East Indies. While all the resources of science are being harnessed to this task in British and American factories, African tappers, using their traditional primitive methods, are making a valuable contribution. Wild rubber trees are scattered over an area of about 12,000 square miles in Ashanti. There are seldom more than three or four trees to the acre, and the tappers have to hack their way through thick undergrowth to reach the creeper-festooned trees. Rubber was first exported from the Gold Coast in 1880, when it was derived almost entirely from vines, but in 1883 a new source was discovered in the Funtumia tree. After this discovery, rubber exports soared until they reached a peak figure of nearly 6,000,000 lb. in 1898. The development of the Malayan plantations, and the destructive methods of tapping practised by the Africans, led to a sudden decline in African rubber production. Now the march of events has revived the African rubber industry as a valuable source of supply for the Allied war effort

AN OPERATION IN PROGRESS IN THE WEST AFRICAN JUNGLE: It is performed by one medical officer, whilst another administers the anæsthetic. Two orderlies are bending over a steriliser; and the corporal on the right has just lifted the tray containing the instruments out of the steriliser

A FIELD AMBULANCE AT WORK IN WEST AFRICA: A stretcher squad on the march. Here are two pictures showing something of the work of an Advanced Dressing Station operating under normal conditions. The Africans in the unit are composed of four main groups—Nursing Orderlies, Stretcher-bearers, Drivers, Enlisted Personnel and Mess Servants. The majority come from the coastal and central (Ashanti) districts. They vary considerably in educational standards, and the common languages are Twi and English. The method of head carriage used above is the one preferred by African bearers; and the men have to be carefully selected for uniform height. The handles of the stretcher rest on rolled towels on the bearers' heads. They are capable of carrying a stretcher some miles through rough country in this fashion, with the casualty camouflaged by small branches, which also protect him from the sun

A WIRELESS OPERATOR of the Royal West African Field Force

A NATIVE SERGEANT serving with the Fighting French in Equatorial Africa

NATIVE LABOURERS ARE HERE HELPING AMERICAN ARMY ENGINEERS to lay metal landing-mats for a mile-long runway at an airport under construction on the West Coast of Africa, near Dakar

HITLER'S HUNT for FRESH VASSAL ARMIES

The Divisions of the "Satellite" States Have Mostly Disappeared—and Now Fresh Cannon-fodder is Needed

By FERDINAND TUOHY

AMONG the prolonged and shattering headaches from which the Nazi bosses are currently suffering, by no means the least is that concerned with the raising of new satellite armies in place of those squandered, or gone with the wind, in Russia. Nothing more than reasoned optimism allows one to suppose that Hitler will find it impossible to build anew anything like the vassal strength he was able to parade at the outset of his 1942 offensive last May.

Josef Stalin has told us that of the 240 enemy divisions then lined up against Russia, 61 were satellite formations, namely, 22 Rumanian divisions, 14 Finnish divisions, 13 Hungarian divisions, 10 Italian divisions, and 1 Slovak and 1 Spanish division. Allowing 15,000 men per division, this implied about 900,000 men. Stalin might have added that Hitler tricked into field or front-line service many of fifty battalions recruited in Lithuanian, Latvia and Estonia, and that scattered here and there were "anti-Bolshevik" fragments from France, Denmark, Holland and Belgium. Maybe a round million vassal troops, all told, on the scene of operations.

Next, to disentangle what has happened to this multiple host.

"Out of the three horses which drew the German chariot last summer," comments Ilya Ehrenburg, "the Rumanian was the first to go lame," which is not surprising, seeing that the Rumanians went into the thick of the fighting at Sebastopol weeks, if not months, ahead of the other two "horses," the Italians and Hungarians, and that they remained constantly in the cockpit until largely dissolved at Stalingrad-and-after and in the Caucasus. The Rumanians surprised everyone having memories of the last war by the way they fought. Glittering prizes had been held before them—Bessarabia, Bukovina, participation in the Ukraine El Dorado, colonisation of the Odessa coast—and response was full. Hitler was able to take all but four divisions out of Rumania.

After the retaking of Rostov, the Russians announced that of Rumania's twenty-two divisions on the Eastern Front but two survived. This does not, of course, mean that 300,000 men have vanished from Hitler's control. Hitler will tell you he is regrouping the Rumanian forces. What "annihilated," "wiped out," "ceased to exist," have apparently come to mean in the east is that about a quarter to a third of the original strength manages to disengage, but a shapeless mass it is, separated from stores, munitions and equipment, in sorry physical and mental condition and requiring many weeks in which to refit prior to reincorporation in freshly-formed divisions.

It may well be that Hitler still has 100,000 Rumanians under his command in Russia, but what a disillusioned, dispirited and downcast lot they are! Russian intelligence officers, who have been having a high old time, tell of a common vassal state of mind. These men relied on Nazi invincibility. To be on the winning side, and to be favourably considered in the New Order—such were the lures. "An easy and decorative victory." The moment "a hard and ignominious defeat" became traced before the eyes of satellite troops, they saw several reasons for throwing in their hands, the readiest being that the Germans got better rations and winter clothing, and that the Nazis stole the food from their families at home.

Though the Rumanians bore the early brunt, the Italians and Hungarians pulled their weight in a different manner. While the Russians were everywhere retreating, the satellite armies were vastly useful, providing the necessary man-power for secondary jobs as crack German forces achieved and exploited breaks-through. These behind-the-lines jobs made the Hungarians and Italians well known to Russian guerillas and partisans, who later made a dead set at their foreign tormentors as these drew westwards in confusion. However, long before this supervened, Hungarians and Italians were sucked into the battle, at Voronezh and in the Caucasus. I cannot even give a main outline, but "Voronezh" will remain graven in Budapest and Rome, coupled with the name of General Golikov. On the Don-and-after, most of the Italo-Hungarian divisions were cracked in pieces.

Captured Magyar officers said they refused to sacrifice their professional cadres in the slaughter. These would be wanted afterwards, in Hungary. They likewise admitted that as many as possible of Serbs, Rumanians, Ruthenians, and Slovaks were called for service with the Hungarian Army and given to Hitler.

The Slovak division mentioned by Stalin has evidently broken up, too. As for the Spanish Blue Division, its usefulness, never great, is believed to have ended with the serious turn at Leningrad. Its 10,000 are reported as awaiting repatriation. These and other "anti-Bolshevik" contingents have had little more than a window-dressing value—indeed, have been voted by Nazi commanders more nuisance than they are worth.

By far the most fortunate of Hitler's vassals have been the Finns, none of whose fourteen divisions is claimed by the Russians among the familiar "wiped out" series, no doubt because only a small portion of the Finnish Army had ever been put into a Hitler "annihilation offensive" against Moscow in 1941. The relatively intact state of the Finnish Army has no doubt hardened the heads of a hard-headed people. But it is more than likely that the Finns have had enough of Strategist Hitler, and that they will not again be found fighting outside Finland and its approaches. The only other vassals to escape the shambles, the Bulgarians, have been homebound all along and are even more unlikely to be drawn from the domestic heath. That these Slavs will go on doing police duty in the Balkans in the hope of eventual grab at their neighbours' expense, and that they will defend their end of the "Fortress Europe" with their powerful, untouched sixteen divisions must be Hitler's best hope of the Bulgars unless and until the Nazis contrive a transformation of the eastern war.

The whole tendency of the vassal Governments is to look homeward just at a time when the Germans are striving to conjure substitute satellite divisions to fill the places of those disrupted in Russia. Hitler lately pressed Ciano, Antonescu and Horthy. Each is believed to have pointed out that if the Germans took more man-power, they could not expect to be supplied with foodstuffs and raw materials as in the past—there simply wouldn't be the labour any longer. But this was only a part of the truth, making things polite. Italy, Rumania and Hungary would cling to their remaining land forces for a variety of reasons.

Italy, facing a big invasion risk, has twenty-three divisions tied down in the Balkans. How can she equip another big expedition for Russia, when even the huge Balkan leakage is questioned in a country terrified of air raids, going ever more foodless and sighing only for the end of the war? More cannon-fodder for the Russian front, and Italy's part in "withstanding Communism" would be jeopardised in Italy itself. Where the general hold of the Fascist party is rapidly waning.

In Rumania, "anything may happen and it probably will." The country has been milked of its produce; its sons lie slaughtered far away; explosive hatreds confront one another in the homeland; the bombing of Bucharest impends; and, anyway, Rumania direly needs such divisions as she still can muster in order to stand up to the snatching Magyar just beyond her frontier, and to tackle domestic revolution should it break.

Horthy has gone so far as to demand that Hungarian workers be sent home from Germany. Hungary can raise many troops yet, but she wants them as a guarantee against Rumania, and in order to be strong domestically when hunger, the bombing of Budapest and that war-is-lost spirit have cumulative effect.

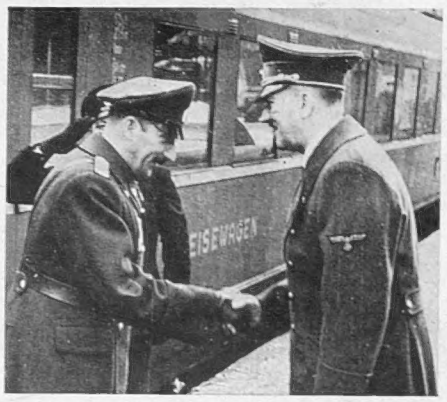
The Germans will manage to raise fresh satellite divisions with the cry: "Save the European Citadel from the Mongol hordes!", but not in past quantity and quality. What could be the spirit of the new levies when their sturdier forerunners had to knuckle under, no more heart in it? Quite probably the new vassal units will be made to fight with German divisions, so as to prevent a future crop of "surrender gaps" in the line, more numerous than in the past. Or else more of the vassal formations will be deputed to police the occupied territories and to hold lesser areas against invasion, thereby freeing German divisions for the fighting.

Hitler may get new Rumanian and Hungarian divisions as far as Odessa in room of the vanished hosts and replenish the least hit of the old formations, but is he likely to achieve much more? As for the small Baltic contingents, they have refused to take the oath to Hitler, and they say they will not do more than stand defensively on their own frontier. And as for Lie's Norwegian battalion, Clausen's Danish and the Dutch and the French units, few recruits have rallied to the cry of "The Barbarians!" Too late, Adolf! Why, the Dutch quisling-commander has been executed, and Doriot, who raised the French "anti-Bolshevik" contingent, is trying to disconnect from his own treachery!

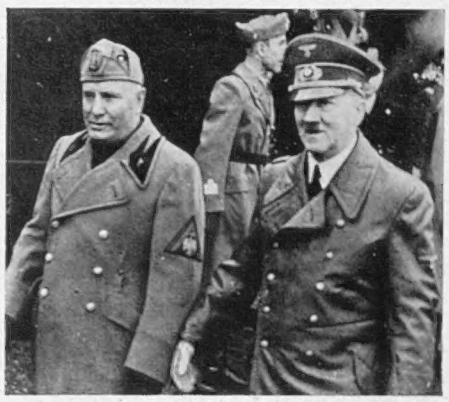
United Nations, invaders from east to west will yet find themselves locked in battle with the satellite armies, but these will be near, if not on, their own soil. Such seems to be the prospect. Gone the days when Hitler could summon vassal divisions by tens and twenties for fresh and joyous campaigning in other people's countries!

There may be something in the comparison between Hitler's feverish whipping up of new German and satellite divisions and Napoleon's call on his French and Continental reserves after his retreat from Moscow. There followed Leipzig's "Battle of the Nations," when the Continental levies were not of much assistance to an already beaten leader.

VASSALS ALL . . . in Consultation with their Masters



BULGARIA. King Boris is greeted by Hitler, when the two met to "discuss subjects of mutual interest." So far the Bulgars have been the only Balkan people to escape the shambles!



ITALY. Hitler and Mussolini, when they met at Salzburg in May 1942. Since then Führer and Duce have confined their talks to the telephone, and much that is disastrous to both has happened

FINLAND. Marshal Mannerheim, military leader of the Finns, is welcomed to the Führer's headquarters by the Führer himself. Keitel—since demoted as a result of the disastrous German campaign in Russia—smiles in the background

RUMANIA. Marshal Antonescu is greeted—not by the Führer, but by Ribbentrop. He went to Hitler's headquarters for a complete series of conferences in January last. Rumania has suffered most of the Balkan countries

FRANCE. Laval is called to confer with his master. A picture taken during a recent meeting at which Ciano, Göering and Ribbentrop were also present

JUNGLE FIGHTING AT ITS WORST

Pictures During the New Guinea Campaign Before the Japs Were Cleared Out of Papua

THIS WAS A COCONUT GROVE NEAR BUNA MISSION : It was a happy hunting-ground for Jap snipers, until the Australian artillery went into action against them—with this result. The Buna area has now been entirely cleared of the enemy

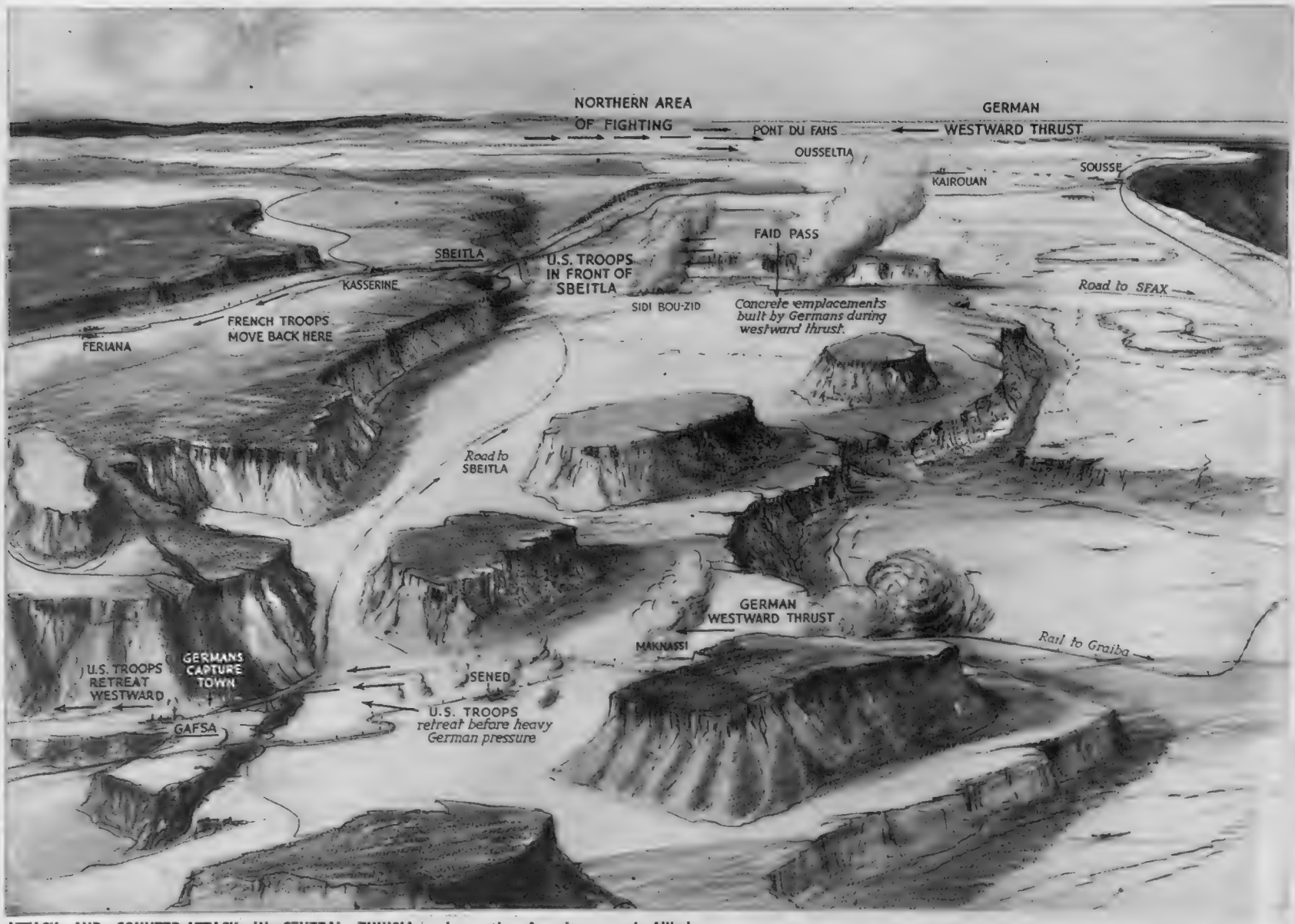
VICTIMS OF THE JUNGLE FEVERS : These haggard U.S. soldiers, who fought in the Allied drive on the Sanananda front, have been stricken down by illness. They are being driven in an Army "peep" car to an emergency aerodrome, whence they will be evacuated to a base hospital. The climate where the fighting took place on the north coast of New Guinea is amongst the worst in the world for white men. That, and the dense jungle, made the campaign against the Japs the most arduous of any in the present war

TAKING OUT THE WOUNDED : Native stretcher-bearers rest in the shade of a coconut grove as they, and the wounded American soldiers they are carrying from Buna, take the opportunity to relax. The wounded are on their way to hospitals in the rear

STURDY YOUNG NEW GUINEA NATIVES carry a casualty to a clearing station behind the Buna lines. These men have been found to be willing workers and often they have to traverse miles of jungle country with the wounded

JUST AFTER THE FALL OF GONA : Australian troops rest after the charge which cleared the village. Tired and worn out, the soldiers dropped for a rest, even though they were right in the middle of positions in which were dozens of dead Japanese

GENERAL SIR THOMAS BLAMEY, C.-in-C. of the Allied Land Forces (left), and LIEUT.-GENERAL R. L. EICHELBERGER, Commander of the U.S. troops, see for themselves the terrible conditions under which the war was waged. Here they are seen at the entrance to a Jap pill-box, some of which were so built that they were impervious to everything except a direct hit



ATTACK AND COUNTER-ATTACK IN CENTRAL TUNISIA, where the American and Allied Forces have been striving to prevent the Axis from enlarging their vital "corridor" along the coast and around Gafsa for the retreating Afrika Korps from Tripolitania—*Drawing by Percy Horne*

In Tunisia the chief fighting during recent weeks has taken place in three areas in the central part of the province. American troops first appeared on the scene in the Maknassi area to the south, with the native town of Gafsa in their rear. This latter town is dominated by an ancient kasbah and surrounded by a beautiful palm oasis : a motor-coach service used to connect it with Tebessa further to the west. In the centre zone, stiff fighting took place in the Faid Pass district, where the Germans had built concrete emplacements at its mouth. Further north, encounters also occurred in the Ousseltia-Kairouan-Bou-Arada area. The German objective was evidently a general closing of all the doors leading to the coastal belt. After some preliminary trials of strength in the second week of February, an intensive forward movement developed during the third week—chiefly by way of Maknassi, against positions from which U.S. troops were operating. A brush with the enemy at Sened seemed to end in favour of the U.S. forces, but the enemy was evidently only feeling his way through a new area : soon he developed a heavy attack from Sened towards Gafsa, on the edge of the Chott Djerid. The Americans gave ground and retired westward. The Gafsa-Sened area is an interesting one : it is reached by way of a light railway from Sfax, through Graiba Junction. By its means, one passes through Maknassi and Sened to Gafsa, once the powerful city of Capsa and now a curious old town occupying one of the most beautiful oases in Northern Africa

THE TUNISIAN BATTLE ZONE, showing how the province has been split into halves. The former position held by the Allies is indicated ; and also the line to which the Americans around Gafsa were forced back

Well inside the Tunisian border lies the Mareth Line, the fortifications which the French built some years ago as a retort to Italian threats against the North African French colonies. Its capture by the advancing Eighth Army is considered to be just a matter of preparation and time. Rommel, therefore, has to be sure of effecting a junction with Arnim in eastern Tunisia away to the north. And this is the reason for the recent fighting in Central Tunisia, in which American forces, principally, have been involved. The map on the left shows how Tunisia has been split into two parts, with the Axis holding the eastern portion. It is not unlikely that—owing to the position of the Chott Djerid and the marshes to the south of Gafsa—outflanking movements from the west will be impracticable for the Eighth Army. Hence the vital importance of what is known as the "Gabes Gap," to the north of the Mareth Line

The BATTLE ZONE in CENTRAL TUNISIA

Where General Rommel has Widened the Union with General Arnim Through the Gabes Gap

—*Special Sphere Drawings and Diagrams*

HOW THE EIGHTH ARMY IS COMING UP FROM THE EAST towards the assault of the much-discussed Mareth Line, by way of Medenine

KAIROUAN

The Famous Arab City in Central Tunisia Which Has Become German Headquarters in the Fighting Zone

Drawing by Percy Home

RECENT German operations in Central Tunisia have been directed from one of the most remarkable cities in the whole of Northern Africa. Kairouan has been described as the Canterbury of Islam in Northern Africa. It contains the great Mosque of Sidi Okba, the famous Arab conqueror who swept all before him in the seventh century and established the Moorish power from Egypt to the Atlantic. Why this particular site should have been chosen as the great Conqueror's capital has long been a puzzle to historians. Any fertility it once possessed has long vanished; the surrounding desert is dry and sterile, but the walls of the city still stand, and a forest of towers and minarets still thrusts upwards into the sky.

Kairouan is no longer the important city it once was, having ceded first place to Tunis; but in historic importance it still ranks first in the Arab world. A visit to the numerous mosques and zawias is a remarkable experience. The change from the heat and dust of the desert without into the cool, serene beauty of the interiors of the mosques has to be experienced in order to be fully realised.

The Djama, or Mosque, of Sidi Okba lies at the eastern extremity of the city, and is remarkable for a splendid courtyard, and a massive tower which rises high above the surrounding buildings. It is considered to be the greatest of all the mosques of Northern Africa, though for sheer loveliness the Zawia of Sidi Sahab, just without the walls, is possibly its superior. Other remarkable mosques within the city walls are the Djama Zitouna (Mosque of the Olive Tree), the Djama Sidi Bou Djafoura, and the Mosque and Zawia of Amor Abbada. The last is remarkable for a group of five great domes.

The walled city encloses a population of some 20,000 Arabs, while to the west lies a later outgrowth of the city, unwalled, which is almost as large in extent. The white French population, some 600 or 700, occupy a newly-built white cantonment to the south of the walled city. Passing through the *zlas* (as the outer city is known), one reaches a steep hill, on which the Moslem cemetery is placed. Thence one can obtain an excellent view of the city and the surrounding country. Away to the west is the road to Pichon and another to Ousseltia. From the eastern gate runs the road to Sousse, while away to the south can be seen the railway which connects Kairouan with both Sousse and Gafsa

THE NATURE OF THE COUNTRY IN THE MAKNASSI AREA IN CENTRAL TUNISIA, where the Americans first came into serious conflict with the Germans whilst attempting to reach the coast and thus cut off the retreat of Rommel—*Drawing by W. G. Whitaker*

It was at Maknassi, on the road and railway line to Sfax, that the U.S. troops first encountered the German onslaught. The Americans were pushing out towards the coast when the Axis realised their danger and began to push back as hard as possible; eventually the Americans were forced back to beyond Gafsa. In the Maknassi region the country is flattish, and swampy in places; the roads are not too good, never having been intended for heavy military traffic and, consequently, boggy and treacherous in the rainy conditions of the past few weeks. Many of the bridges, however, are surprisingly modern, having been built by French engineers in peacetime. The quantity—and quality—of American equipment brought into North Africa has been considerable

WITH THE EIGHTH ARMY ON THE LAST LAP TO TRIPOLI: Transport moving down the road towards Azizia, which was one of the three lines of approach to the final objective. Although Rommel made no strong stand at any point, he fought rearguard actions, carried out demolitions, and mined the roads

SAPPERS BUSY AT WORK REPAIRING A BREAK IN THE COAST ROAD. Hold-ups such as this were, however, only of short duration; whilst repair work was in progress, our advancing columns often took to the desert, by-passing the destroyed sections in their eagerness to maintain the advance

THE GREATEST MARCH IN MILITARY HISTORY

Agheila to Tunisia— A Fighting Masterpiece

Some Unappreciated Aspects of the Eighth Army's Achievement

WHAT exactly happened during the advance from El Agheila to Tripoli and Tunisia? The Eighth Army seemed, after intervals of silence, merely to make prodigious leaps forward; of martial opposition they might well have met none. Then came the triumph of Tripoli, the new interest of Tunisia, the Casablanca distraction. Our long-patient desert army had achieved a masterpiece without fully impressing that fact on the world!

Thus it is not generally realised what a hideous combination of physical and military difficulties faced the "desert rats" when, on Sunday, December 13, they were given the order by General Montgomery to attack Rommel's positions at Mersa Brega, just east of Agheila. Proving himself as superficially astute in retreat as in attack, Rommel had prepared a strange reception for the great British force.

First he had chosen a position that gave the defence all the advantage. Placing his machine-gun nests and mines at the entrance of a narrow corridor between the Agheila marshes and tank-proof soft sand-dunes by the sea, he had made it necessary for the Eighth Army to assemble overwhelming strength at the point. But just as the British were ready for the assault he had slipped with his main body away. This was disconcerting. It was made the more so by the way Rommel's engineers had sown their mines and booby-traps.

The main British Army followed the annoying road without incident save an occasional unfortunate mine accident. Its air arm, quite supreme, was continually roaring overhead to bomb what appeared to be Rommel's principal column at Nofilia, some 75 miles away—this was December 15—and the same day came news of the outflanking New Zealanders.

At first it seemed good news. They had brilliantly covered 250 miles of hitherto untracked desert, and, reaching the coast road again where it was crossed by a wide wadi at Matratin, had plunged into the retreating enemy under cover of darkness on the night of this Tuesday, December 15. Reports flashed back that the enemy had been "cut in two."

But again it was frustration. The next few days saw our fast tanks, the New Zealanders, and other advanced elements of the Eighth Army in furious pursuit of that rearguard's remnants. So they came to the end of an arduous 1942 and celebrated the most trying new January of their experience: for this was, indeed, their greatest test. We are apt to underrate not only the African distances but also the sheer malignity of the open desert in high winter. Eyes, teeth, dynamos were clogged with sand during the days: at night the blood and radiators froze. Water was the chief trouble. There could be no relief till another 100 miles and Misurata (where, from all accounts, there would also be a full-scale battle).

Thus the period from December 27 till January 5 is obscured by the darkness of that sand and that struggle with fatigue and supply problems. On January 5 they had struggled through to Buerat, and the next day ignored another sandstorm to reach the point where the coast turned north-west to Misurata and Tripoli. The Eighth Army, like manœuvring forces on Salisbury Plain for an inspection, was assembled and briefed. A period was given for preparation. It ended on Friday, January 15, and the men set off at dawn in three gigantic prongs.

One went down the main road from Buerat village, the other, infantry and armour, went inland a space and then westwards parallel with the first column, while the last prong, almost wholly armoured, went deep south-west. They all

SANDSTORMS ARE ONE OF THE WORST ENEMIES IN THE MIDDLE EAST, and throughout the advance on Tripoli they continued without cessation. The clouds of sand sweep across the desert before a bitter wind, visibility is reduced to nought, and flying has to cease. Sometimes the storms last for days. *On left*, pilots are leaning against the wind as they cross the aerodrome; handkerchiefs are tied round their mouths to keep out the sand. *On the right*, a pilot is in trouble; the wind has found a weak spot in the bracing of his tent and he is making valiant efforts to prevent its total collapse

THE PURSUIT OF ROMMEL THROUGH THE "BAD LANDS" OF TRIPOLITANIA, a fantastic stretch of country resembling the deserted and frozen mountains of the moon, where all is dead. An impression by MONTAGUE DAWSON of sand-swept gorge scenery by moonlight

From El Agheila the Eighth Army, ploughing its way along the coast road to Tripoli, passed through a vast wilderness of sand, rocks, escarpments and deep, inhospitable ravines wide enough to hold a large provincial town. Some of the wadis had beds like the roughest ploughed land, ocky deserts more suitable for tanks than for wheels; later the Army ploughed through soft st country in which the convoys created their own dust-storms: at times fog was encountered, so thick that the next lorry would become invisible at 20 yards range. Sometimes the advancing troops would run into what can best be described as eerie stretches beset with Herculean tasks for drivers and vehicles alike. In some cases, the areas traversed had probably never before been covered by human beings, so deserted and abandoned were some of them, with no traces whatever of human habitations for hundreds of miles in all directions. And throughout all raged the sandstorms and the winds—practically without ceasing during the whole of the advance to Tripoli

ncountered slight resistance, espe- ially in the wadi, but continued thrusting all Saturday, all Sunday, it an average speed of one mile advance per hour. In eighty hours they had reached, severally, points 80 miles ahead of their original positions. The country was a paradise after the Sirte run. Sunday night, January 17, the first prong was at little Gioda, 15 miles below Misurata, the second at Dufan, and the third at Beni Ulid. Another advance of 30 miles and the coastal column was, on January 19, at Zliten, having by-passed an empty Misurata—empty, after all, while the inland spearheads, having fought some tough little battles with Germans and mines, were beginning, with roaring tank-tracks, to mount the horrid red gorges of the Jebel foothills.

Inland from Tripoli the Jebel Mountains ran parallel to the coast and then came down to it at Homs, about 30 miles towards Tripoli from Zliten. Up near the crest of the mountain backbone, between the inland columns of the Eighth Army and Tripoli, was Tarhuna; and perhaps Rommel might have stood along the crests between this place and Homs.

But no; only slight rearguards were once again encountered: the true enemy was ever the country. So they came in the different columns to Homs and Tarhuna.

Rommel had posted reasonably strong pockets of troops at the very end of the rocky defiles. Near Homs our northern column halted briefly, before regrouping and sweeping the opposition aside. The middle, or Tarhuna, prong did the same; and the inland spearhead, divesting itself of all save the fastest tanks, sped in a semi-circle south of Tripoli. The two first columns, merging, came down and into the fine capital on January 23, after a brush with the defenders of the province's most valuable aerodrome at Castel Benito, 6 miles south, and they found that Rommel had also taken the inland by-passing route.

Therefore the more mobile and the fresher elements did not stay in the city more than a few hours, but pressed on to follow the trail of the armour. This, after quite a heavy engagement with German tanks south of El Azizia some 25 miles south of Tripoli, was fighting light enemy rearguards mile by mile of the way along the Via Balbia. By January 25 a strong body of the men from Tripoli was itself 40 miles west of the capital at Zauia, and four days later had captured the last Tripolitania port of Zuara, while advanced patrols had crossed the Tunisian border—concluding the greatest march in military history, and concluding it (what is outstandingly remarkable) in complete, good, fighting order; 1,500 miles in less than three months, the last 750 in some six weeks.

HOW THE GORDON HIGHLANDERS CAME INTO HOMS: Mounted on tanks ready to go into action should the retreating enemy determine to make a stand. He didn't! And the same was found to be true at most of the towns in Tripolitania occupied by the victorious Eighth Army

SIGNALMEN AT THE PLOUGH—in order to lay telegraph cables through the desert. Into the trenches so ploughed up, wires were later laid. The Royal Corps of Signals did a fine job of work in the forward areas throughout the long and tiring advance to Tripoli

A STRANGE AND WELCOME SIGHT IN THE DESERT for the men of the Eighth Army, who had for months been compelled to hoard every drop of precious water. This was a water-hole found by our advancing troops at a point some 80 miles to the east of the city of Tripoli

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The GREAT RUSSIAN OFFENSIVE in the STALINGRAD and DONETZ REGIONS

Two Special Drawings of the Conditions under which the Red Army has been Fighting

"CRACK" NAZI SOLDIERS SUFFERING FROM THE TERRIBLE EFFECTS OF THE RUSSIAN WINTER

The legend of the "invincibility" of the German Army was broken at Stalingrad, where Field-Marshal Paulus's Sixth Army was whittled down by the Russians and finally forced to surrender. Before the end, the "crack" troops of which this army was composed were reduced to a pitiable state of despair and exhaustion. As well as the incessant hammering by the Soviet forces, the Germans suffered terribly from the cold and the general climatic and geographic conditions. When this small party was encountered, the shrunken and weakened soldiers comprising it were huddled pitiably together in the snow, trying desperately to keep warm until they were marched away to the comparative comfort of a prison camp

HOW THE DEFENDERS OF STALINGRAD LIVED IN DUG-OUTS ALONG THE BANKS OF THE RIVER VOLGA DURING THE DARK DAYS OF THE GERMAN ASSAULT: A scene near the headquarters of Lieut.-General Chuikov, Commander of the 62nd Soviet Army, one of the men responsible for the Steel City's defence—*Drawing by E. Byatt*

The west bank of the Volga is a high clay cliff, which rises steeply from a mud beach to a height of about 100 ft. All along this cliff, north and south, the defenders had constructed dug-outs where they sheltered during the heavy assaults made by the Germans. The whole bank was, in fact, a city of cliff-dwellers. Some of the dug-outs were built deep into the cliff with many rooms and passages, like those occupied by the headquarters staffs. Others were built simply of logs and leaned against the cliffs. It was behind this bank that the Red Army held out: five times headquarters had to be changed, yet the big guns of the artillery never ceased to bombard the enemy over the cliff. Their ammunition and supplies were brought in at night, by fearless Russian river-men, who maintained a never-failing service by rafts and barges across the Volga. Below the cliff, down to the water's edge, was an area teeming with activity: above was destruction and death. Lieut.-General Chuikov, Commander of the 62nd Soviet Army at Stalingrad, is forty-two years of age and one of the youngest of Stalin's generals: from September 14, 1942, until the relief of the city his army fought the bloodiest battles of the whole war. On one day alone he lost sixty-one staff officers, killed or wounded. When the German Sixth Army was finally defeated, General Chuikov was able to say: "Five days ago the Germans were only 300 yards away—now they are nearly 300 miles!"

THE SOVIET MILITARY COMMANDERS who have been victorious in the Russian winter offensives, and who have just been decorated in the Kremlin by M. Kalinin, President of the Presidium of the Supreme Soviet

From left to right here are seen: Colonel-General K. Rokassovsky, in control of the operations against the German Sixth Army surrounded and liquidated near Stalingrad; Marshal of Artillery N. Voronov, who commanded the artillery during the same actions; Lieut.-General Tolbukhin; and Lieut.-General M. Gromadin, a Commander on the Middle Don front. The first three received the Order of Suvorov, First Class; and the last-named received the Order of Kutuzov First Class. This picture was taken just after the ceremony in the Kremlin, and was transmitted to London by radio

On left—**THE METHODS OF STREET FIGHTING IN WHICH THE RED ARMY EXCELLED during the advance on Kursk. In town after town in the Donetz battles, pockets of the enemy were cleared out by the advancing Russian soldiers in fierce hand-to-hand battles**—*Drawing by E. Byatt*

In street fighting the Red Army excels: unsupported by artillery or aircraft in many cases, during the recent series of advances, they have carried out direct assaults such as that depicted by our artist on the left. In the centre of Kursk, in particular, the fighting was of a sanguinary nature. Shock units led the way into the town, using bayonet and knife to attack small groups of the enemy who were attempting to stem the Soviet advance from cellars and dug-outs, where they had thought to entrench themselves. The Red Army has also become particularly adept in the use of tommy-guns and hand-grenades: with these, and with their bayonets, they have swept through village after village and town after town, routing out the remaining Germans and wiping out the many pockets of resistance intended to hold up the victorious surge-forward of the Soviet main bodies

THE DESTROYER WHICH LOST A FUNNEL IN AN ATLANTIC HURRICANE: H.M.S. "BEVERLEY" (FORMERLY THE U.S.S. "BRANCH") BATTLING THE GREAT STORM WITH HER FUNNEL LASHED TO THE DECK—*Drawing by Montague Dawson*

After battling for two days and a night through one of the worst Atlantic storms of recent years, the ex-American destroyer *Beverley* reached Newfoundland in time for Christmas—minus one of her funnels. But she brought the funnel in with her, secured on deck. It had been flattened and torn away by the force of the mighty wind. The storm, which was described by the shore station in Newfoundland as "the worst in human memory," blew at hurricane force during December 15 and 16 from Newfoundland to Portugal, scattering convoys and damaging ships and escorts throughout the whole, wide Atlantic. Besides losing a funnel, the *Beverley*'s boats were carried away and her guard-rails bent to the deck. She reached harbour after a passage of fourteen days with only five tons of fuel remaining in her bunkers, barely enough for five hours' steaming. *Beverley* is a "flush-deck" destroyer of the Burnham class of fifteen. As the U.S.S. *Branch* she was launched on April 19, 1919. She has a displacement of 1,190 tons and a designed speed of 35 knots

On right—**AN EXPLOIT BY A BRITISH ACE SUBMARINE COMMANDER: COMMANDER BEN BRYANT DEFIES ITALIAN SHORE BATTERIES IN THE ADRIATIC TO SINK A COASTAL STEAMER**—*Drawing by Wm. McDowell*

Commander Bryant, D.S.C., R.N., has already figured in a number of exploits which have earned fame for him and his submarine One of these has only just been made public by the Admiralty, although it happened a few months ago. The British submarine had entered the Adriatic Sea to hunt enemy shipping. When near the Yugoslav shore, a small coastal steamer was sighted through the periscope: it appeared to be carrying enemy troops. Although he was within range of the shore batteries, Commander Bryant decided to attack the ship with gunfire, and so conserve his precious torpedoes for bigger game. When all was ready, he brought his boat to the surface. His gunners sprang into action, and fired a score of rounds as fast as they could load. Every shot hit the target. Many of the enemy on the upper deck were seen to jump over the side and the ship beached itself on an island. By this time the shore batteries had opened fire on the submarine, and Commander Bryant gave the order to dive. Only a few minutes had elapsed between completely surfacing and diving again. For the rest of the day, enemy ships and aircraft hunted the submarine, but without success, despite the prevailing flat calm, which helped the hunters. Two days later, in similar conditions, Commander Bryant made another daring, and successful attack on a small, deep-laden supply ship. When he fired his torpedoes, an enemy torpedo-boat was only 400 yards away from the submarine. Soon afterwards, the torpedo-boat attacked with depth-charges, but Commander Bryant safely eluded them. He finally returned to his base after having sunk or wrecked four ships, and undertaken a spirited action against a fifth. He also had given the enemy shore patrols along the Yugoslav coast a few nasty shocks!

It might be noted here (in connection with Mr. McDowell's drawing on the right), that so expert are our submarine crews in handling their guns, that they can be on deck and serving the gun even before the submarine has fully surfaced!

By thus using shells instead of torpedoes—only a certain number of which can be carried on board on each cruise—the submarine commander can extend considerably the period of his offensive patrol against the enemy's shipping and vessels of war

COMMANDER BEN BRYANT—with his famous beard, and without. "Bearded Ben Bryant," over 6 ft. and one of the tallest men in the Submarine Service, is no longer bearded: at the request of his wife, he is stated to have parted with the Royal Navy's most famous beard. He is the father of two children—Patricia, aged four, and Jeremy-Joseph, aged five months (whom he has not yet seen). Commander Bryant now commands the "P211," one of the latest-type submarines: with his recent sinking of four enemy ships in one day, he has brought his total of enemy vessels destroyed up to twenty-nine. To-day, Commander Bryant is regarded as one of the Royal Navy's aces

The ANTI-SUBMARINE WORK of the ROYAL NAVY

—A series of Special Sphere *Drawings*

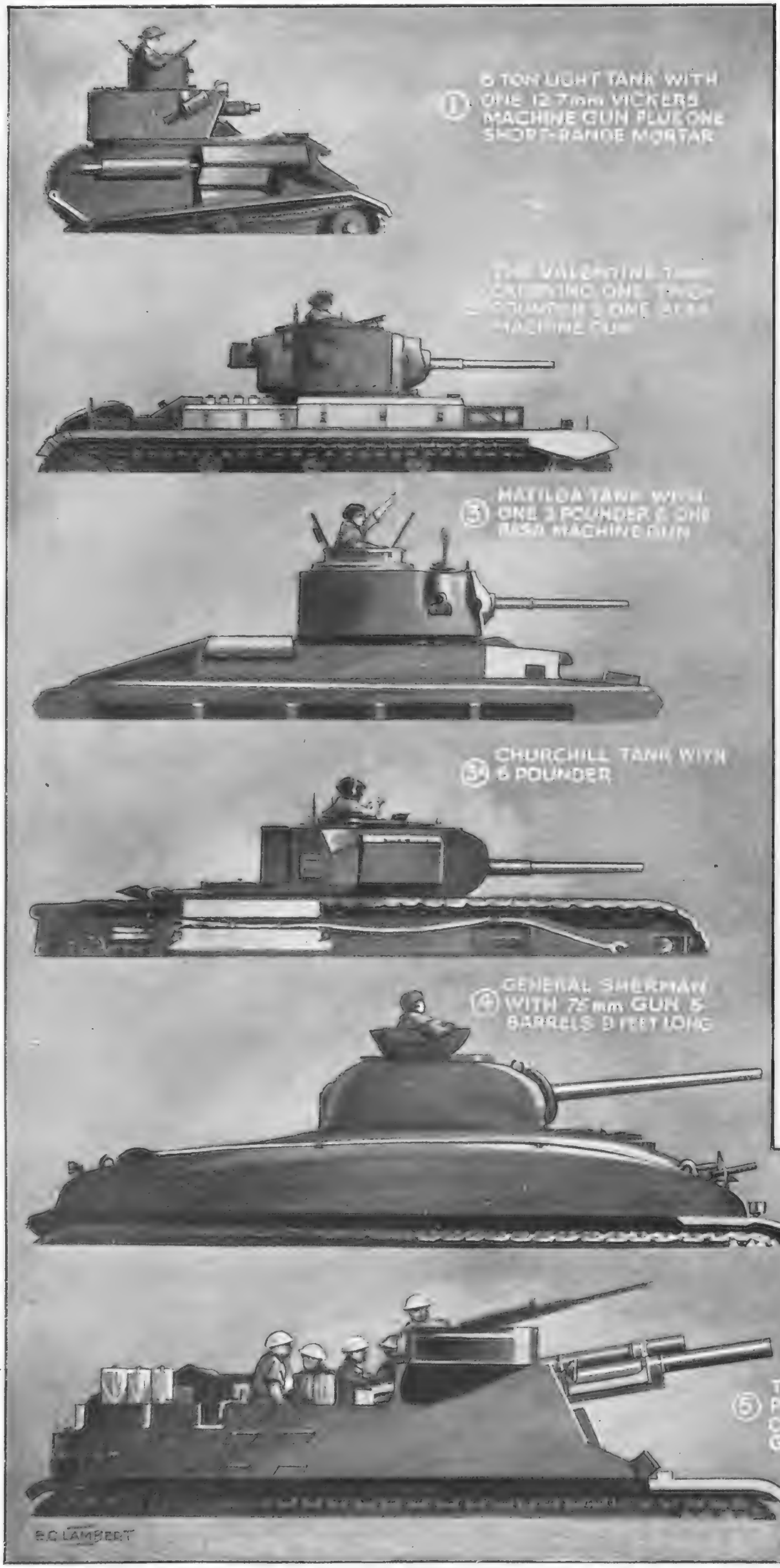
FIGHTING THE U-BOATS IN THE ATLANTIC : H.M. DESTROYER "VANESSA," ESCORTING AN ATLANTIC CONVOY, ENGAGES AN ENEMY SUBMARINE WITH GUNFIRE AS SHE SURFACES AND THEN RAMS HER—*Drawing by Wm. McDowell*

A convoy which arrived in this country in the early days of January was saved from attack by the prompt action of two of the escorting destroyers, which rammed and sank the only U-boat actually sighted during the voyage. It was during the afternoon that the "pig-boat" was sighted on the surface some miles away. Seas broke heavily over the bridges of the two destroyers *Vanessa* and *Hesperus* as they headed at speed into the Atlantic swell. The U-boat submerged, and the hunt was on. Ninety minutes later the *Hesperus* was surprised to see a periscope break surface. It stayed up a full minute while the U-boat—unaware that a second destroyer was bearing down on her—tried to torpedo the *Vanessa*. But the *Hesperus* dropped a pattern of depth-charges which must have rudely surprised the U-boat commander. For some time the two destroyers made repeated attacks with depth-charges. Darkness came, and the moon had not yet risen, but the depth-charge attack went on. Then *Vanessa* made the signal for which the *Hesperus* had been waiting—"U-boat ahead. Am ramming." The U-boat, unable to stand the relentless shower of depth-charges, surfaced, and the *Vanessa* went immediately in hot chase. She engaged the enemy with gunfire, while the U-boat, still full of fight, tried to bring her stern torpedo-tubes to bear. The *Vanessa* struck the U-boat on the starboard side. A wave lifted her bows and crashed them down on the hull casing. Some of the U-boat's crew were seen jumping into the water, but the U-boat was not finished yet, and made off again at top speed. But not for long—for within a short space of time the second destroyer, *Hesperus*, had finished her off completely. *Vanessa*, the destroyer in Mr. McDowell's drawing above, is an old-type vessel—one of the twenty-two "V" class built in 1917-18. She has a displacement of 1,100 tons and a speed of 34 knots. She is armed with four 4-in. guns

THE FAST-DEVELOPING TANK

Why Modern Fighting Vehicles Now Have Longer Barrels for Their Guns

By DONALD COWIE



1. On this tank, dating back to the very early days of the war, there was : one rifle-calibre *or* one 12·7 mm. (0·5-in.) Vickers machine-gun, plus perhaps one short-range mortar and a tube for discharging smoke

2. On the Valentine, there were one 2-pdr. gun and one Besa machine-gun

3. **and 3A.** The Matilda has a 2-pdr. gun and the Churchill was armed at first only with a 2-pdr. Now Churchills are armed with the much more potent 6-pdrs., which did such execution throughout the fighting at Alamein and in the Western Desert

4. On the General Sherman (and this is also true of the latest types of General Grant and General Lee tanks) there is one 75-mm. gun, equal approximately to the 6-pdr., and other smaller weapons. Originally, the 75 mm. could not be fully traversed ; but to-day the latest types are fully equal to those on the German Mark IV tank. The barrels are 9 ft. long

5. The Priest gun-carrier is not, properly speaking, a tank : it is a self-propelled gun-howitzer. This played a notable part in the Eighth Army's desert victories. The Priest is a 105-mm. weapon mounted on a General Grant chassis

'OMPARE the outline of a typical tank of three years ago and one of to-day. The most striking change is in the armament. Surely those machines with which we and other Powers entered the war had no guns, or, at the best, very short and inconspicuous ones? And that is, as it happens, a fact. The long and wicked barrels of the cannon on our latest tanks point to a significant development.

It should not be forgotten that the tank was first evolved simply as a *machine-gun carrier*. A glance at the Bren carriers of to-day will reveal the logical development of the early tank designers' dreams. Right up till 1939 it was considered remarkable, perhaps daring, to mount so much as a light-calibre anti-tank gun on a tank.

This is not to say no big cannon were mounted, nor that the Germans had failed to observe the potentialities in heavy armament. But even they, in the Spanish Civil War, placed their chief reliance on a fast, 4-ton, two-man machine armed with two machine-guns, only occasionally with a fairly long-barrelled, 37-mm. cannon, though they were possibly seeking (successfully) to delude the world.

The other Powers knew about heavy tank guns, and sometimes employed them. The Italians paid special attention to anti-tank cannon on tanks, producing a lengthy 45-mm. piece. But the fact remains that on the outbreak of this war the major emphasis was all the other way. Our own light tanks were armed only with machine-guns; we had a few "mediums" mounting 3-pdr. cannon, or anti-tank guns, or short-range mortars. Thousands of French tanks, so impressive in the photographs of those days, were mainly armed with machine-guns or very light cannon. It will be seen in the old pictures how their armoured might is curiously belied by the short little barrels of the machine-guns scarcely daring to protrude in front.

The mistake was soon discovered. Every Allied participant in the Battle of France spoke of the utter ineffectiveness of the Allied tanks against the Germans. It was not merely that the Germans had strengthened their armour since the Polish campaign; it was primarily that the Allied tanks, having no real guns, were completely out-gunned. Actually, in May 1940 we had no more than 100 tanks in France. Most were only armed with machine-guns: it is significant that the few Matildas which were armed with 2-pdr. cannon put up a magnificent show.

That the lesson was not fully learnt is the most remarkable feature. As late as the second battle of Libya, when Ritchie was so badly mauled, our tanks were still inferior to the Germans' in fire-power. Most of our latest models had only 2-pdr. guns to fight it out with German tanks mainly armed with the equivalent of 6- or at least 4-pdrs. Our only tank with proper armament, the General Grant, whose 75-mm. cannon was equal in weight to that of the gun on the German Mark IV tank, was handicapped by an inability for the gun to be traversed from side to side without moving the whole vehicle.

Alamein might not have been won if our spearhead tanks, notably the Shermans, had not been equipped at last with real guns—not only great 75-mm. cannon, but also a 37-mm. piece for anti-aircraft or anti-tank work, as well as machine-guns.

So the modern tank is chiefly conspicuous for its long gun-barrel or barrels. The reason for the length? This is, of course, that the pressure of the explosive charge can be applied to the issuing shell for as long a period as possible. In a short barrel, the shell would be out before the pressure had reached its maximum. In turn, naturally, the mounting of such formidable armament entails other problems affecting the whole tank, but that is another story.

JUST BEFORE THE WAR: A German tank on manœuvres at Wuensdorf, near Berlin, in 1938. The armament appears to be of the slightest

JUST AFTER THE OUTBREAK: Three French tanks in May 1940—heavily armoured, but only lightly armed, according to present-day standards

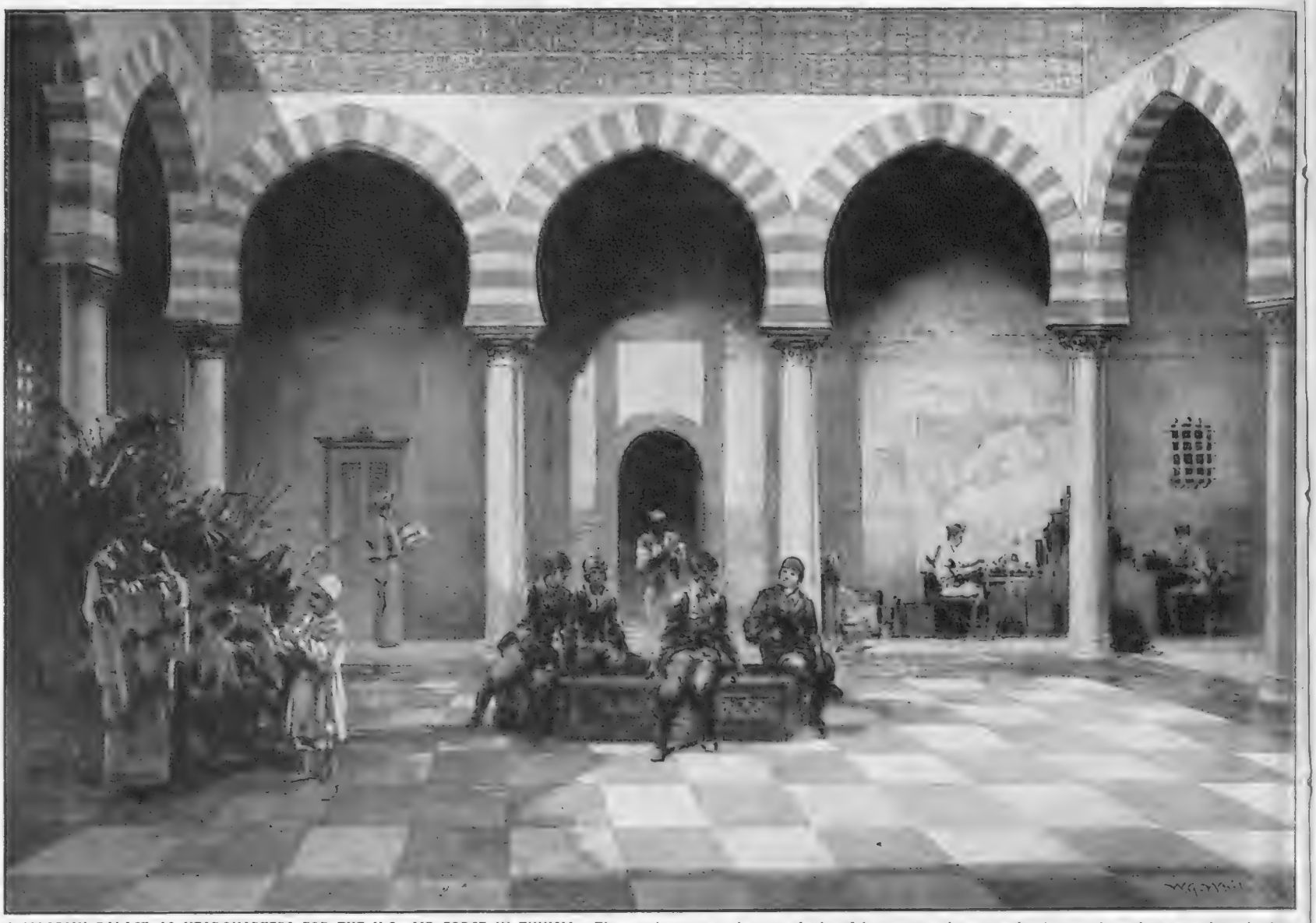
BRITISH FIGHTING TANKS BEGIN TO GROW: A General Grant tank in December 1942, showing the tremendous increase in gun size and hitting power brought about as the result of the bitter lessons learned during the protracted battles in Libya and the Western Desert

THE TANK DEVELOPS INTO A SELF-PROPELLED GUN-CARRIAGE: An abandoned 7·62-cm., mobile German gun found in the desert some 45 miles beyond Buerat during the advance on Tripoli. This vehicle indicates the present-day idea of mounting heavy armament on a tank chassis

THIS IS THE PRIEST, the deadly 105-mm., self-propelling gun mounted on a General Grant chassis. It is Britain's answer to the German 88-mm., high-velocity weapon which was used by Rommel so successfully in the fierce fighting around Knightsbridge and elsewhere

PUTTING HEAVY ARTILLERY ON TO WHEELS: A large field-piece of 150 mm. mounted on a German Mark II tank chassis with a heavy protective shield. This is one of the heavier weapons used by the Afrika Korps, whose emblem adorns the shield in front

THE WAR BY AIR, by British and American Aircraft—*Special Sphere Drawings*



A MOORISH PALACE AS HEADQUARTERS FOR THE U.S. AIR FORCE IN TUNISIA : The equipment and general air of busy-ness give one the impression that a modern business office has been plucked up from Detroit and planted in the heart of the Arab country!—*Drawing by W. G. Whitaker*

The Americans have taken over an Arab palace. The floors and walls are covered with tiles and mosaics in garish colours like an illustration to an *Arabian Nights* story. There is no tinkling fountain to-day: instead, hard-boiled despatch-riders dangle their feet over the edge of the dried-up fountain waiting to carry messages to the bomber crews out in the desert. Around the courtyard, which is open to the sky, orderlies sit under arches of intricate arabesque plasterwork tapping out operational messages. Duplicating machines, typewriters and tape machines make it look like an efficient business office picked up bodily from Detroit and plumped down in the Sahara. Huge maps are pasted on the tiled walls depicting the Mediterranean battle zone: elsewhere in the Palace a dispensary has been set up, and a luxurious bathroom serves as operating theatre complete with surgical equipment and anæsthetic appliances which add a sinister touch to this picturesque Arab retreat

WHAT SOMETIMES HAPPENS AFTER AN ENCOUNTER WITH THE ENEMY: This Hampden of Coastal Command was detailed for a mission off the coast of Norway. It carried out its mission successfully, but there was strong opposition and the Hampden did not escape unscathed. The picture above, taken from another Hampden, as both were heading for home, shows one of the twin rudders badly torn by flak. But the Hampden eventually landed safely at its base!

YING FORTRESSES AND SPITFIRES OPERATE FROM THE SAME "AERODROME" IN THE SAHARA DESERT: The giant bombers are screened to a large extent by the tall palms of the oasis; but the fighters are often exposed on the desert sands.—*Drawing by Roland Davies*

Fortresses seen here are amongst the first to arrive in North Africa since the American ...lings. "I have spent nearly a week at this oasis fringed with date palms, with the ...ert shimmering away in the distance across the very heart of the African continent," ...te an eye-witness of this scene. "An impressive display of one of the most powerful ...ed punching centres in the world was seen during a walk with the pilots among these ...vily fortified bombers, spaced across the desert, with tiny Spitfires dotted here and there. Arabs stood around silently, watching the huge aircraft take off. I wondered if any German 'Lawrence' stood among them! It is a next to impossible task, even for the French, to supervise Arabs in a way that will single out Axis agents. Arab robes and hoods are, surely, the simplest disguise ever for this purpose. In the early days, R.A.F. pilots flew the Spitfires. To-day this desert airfield is an all-American show, and American fighter-pilots fly Spitfires with United States markings."

PEACETIME PILOTS AID THE EIGHTH ARMY BY TRANSPORTING SUPPLIES ACROSS THE DESERT. A De Havilland Flamingo being loaded up at the base.—*Drawing by Roland Davies*

Civil pilots of British Overseas Airways Corporation have taken—and still are taking—a heroic and vital part in the great advance of the victorious Eighth Army. Taking off from hazardous airfields newly captured from the enemy, they have flown food, petrol and other essential supplies thousands of miles to our advancing forces. On one trip a pilot may carry miles of wire for a Signals Company; on another he will take thousands of letters from home to the men on Rommel's tail. Side by side with pilots of the R.A.F. and the American Air Force, some of these pilots are doing a 1,500-mile round trip between desert dawn and dusk with their big, twin-engined transports. The pilots wear their civilian uniform—the familiar navy-blue suit with the Corporation's cap-badge. Many of them are passenger aircraft captains whose names are familiar to peacetime air travellers. The De Havilland Flamingo shown in the above picture is known as the King Class when operating for the British Overseas Airways Corporation. Its normal crew is three; and it is capable of carrying twenty-two passengers, or an equivalent weight of stores and supplies

The BATTLE FLOWS up to the RUINED CITIES of ANCIENT ROME

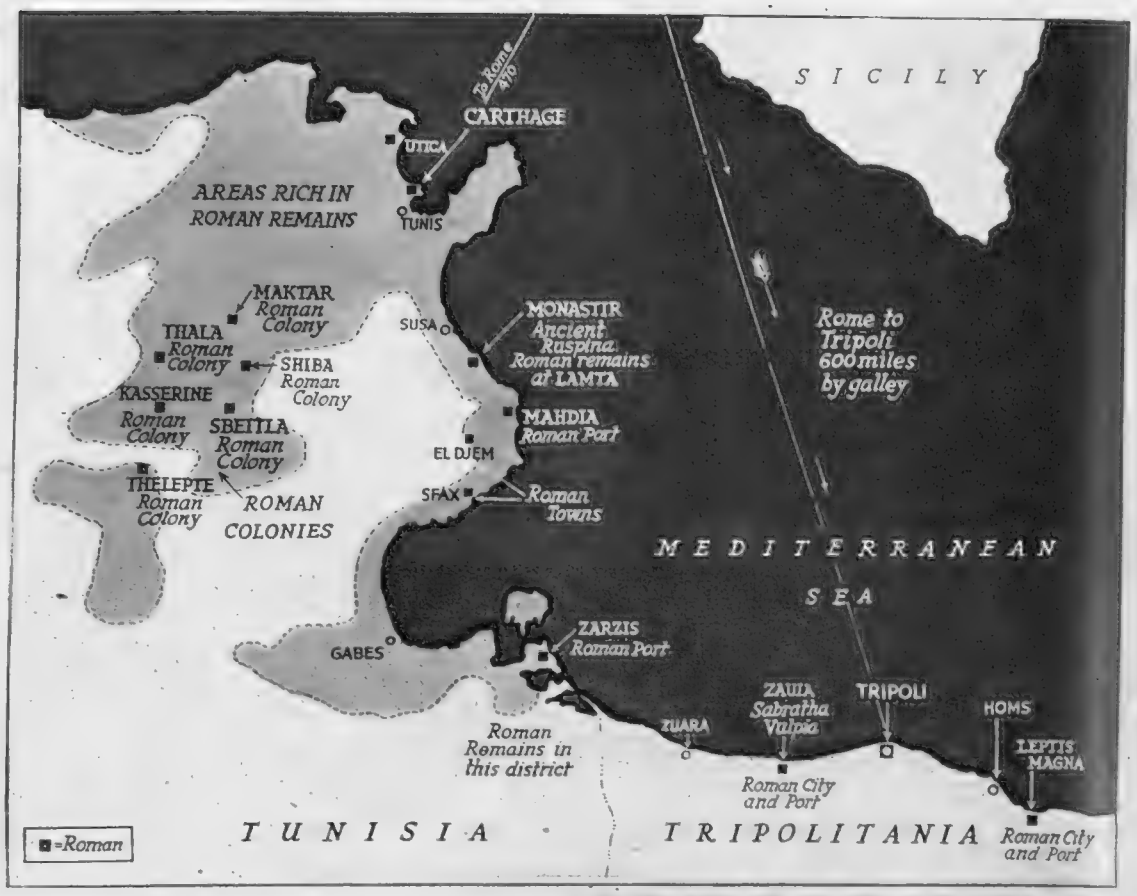
And the Troops are Now Seeing Leptis Magna, Sabratha, El Djem and the Other Former Splendours of North Africa

THE progress of the war in Northern Africa has taken both the First and the Eighth Armies into regions which are full of the records of the might of ancient Rome. It is a little puzzling that no reference has occurred of the impinging of the First Army upon these visible records in marble and stone.

But with the occupation of Tripoli, the evidences of Rome's North African colonies are too great to be passed by in silence.

Carthage, originally established by Phœnician adventurers, had extended her sway over a great part of what we now know as Tunisia and Tripolitania, to be ultimately defeated by Rome in 146 B.C. It was not, however, till the opening years of the Christian era that Rome began her occupation of Northern Africa. From the year A.D. 40 a continuous policy of colonisation was carried out, and great galleys must have constantly passed from Italy to Africa as the various seaboard cities grew in trade and importance under the ægis of the Roman legions. Marbles of all kinds were carried to adorn the cities of the new colonies. Grain and olives were cultivated to an astonishing extent, every use being made of the natural rainfall by a marvellous network of rock cisterns and aqueducts.

As time progressed, the towns and colonies were established farther from the coast, and one is confronted with such astounding sights as that of the amphitheatre of El Djem, capable of holding 60,000 spectators, standing amid level plains which give no immediate sign of any nearby town or



ANCIENT ROME AND THE NEW BATTLE AREA: Where the men of the Eighth Army are now seeing the remains of historic Roman cities, with their amphitheatres, circuses, arches, etc. The period of the highest greatness of this region was the first two centuries of the Christian era

THE ROMAN CITY OF SABRATHA (now known as Zauia): A panorama of the ancient ruins, with the new Italian Museum in the distance; the latter was built by Marshal Balbo, when Governor of Libya, before his death earlier in the war

settlement, and of Sufetula (Sbeitla in modern times), with its triumphal arch and temples to Jupiter, Juno and Minerva, which lies still farther from the sea.

Sabratha lies immediately on the track of the forward moving forces. It stands a few miles to the west of Tripoli and close to the modern town of Sabratha Vulpia (named after Count Volpi). The existing ruins lie between the modern town and the seashore. One first reaches the amphitheatre, which dates from the second century of the Christian era. A pathway takes one to the Forum, where the grouping of golden-tinted stone and dark-blue sea beyond is happy in the extreme. All around one are broad flights of steps with marble flooring leading to Christian basilicas and pagan temples. Most striking of all are the remains of the theatre, which now, with judicious restoration from the actual stones which lay upon the site, present three tiers of columns, rising high above the general level of the excavations.

Some miles to the east lies the second most arresting evidence of Rome's greatness—the once-powerful, walled city of Leptis Magna, the birthplace of the Emperor Septimius Severus. The site has been in process of excavation for some years past, and statues and richly-carved capitals have been constantly coming to light. The golden sands of the desert have preserved the deeply-carved detail, so that it can be studied to-day as if it had come freshly from the sculptor's hands.

The remains at Sufetula must to-day be echoing to the sounds of gunfire, as the remains lie well within the fighting area of South Central Tunisia. They are the more striking as they stand amid bare, scrub-covered desert. The chief outstanding remains which one sees to-day are the Arch of Diocletian and the three temples, attributed to the time of Antoninus Pius, A.D. 138-161. Suffusing these evidences of the Roman effort are the relics of the work of the Byzantine power which sought vigorously to restore the destruction wrought by the Vandals. The cities, owing to the exigencies of the time, had to be made safe from attack. The whole country became studied with fortresses. It has been pointed out that it has been hard to find any considerable town or village without its Byzantine fortress. Many of these strongholds are still in use for their original purposes. The Arab towns of Mila and Tebessa and the French camps at Guelma and Setif are still sheltered by ancient walls. Strong, stern and businesslike, hardly injured by their life of fifteen centuries, they convey a vivid impression of the military skill of their architects and of the thoroughness of their work. B. H.

SCOTTISH SOLDIERS OF THE EIGHTH ARMY VISIT THE GREAT ARENA IN THE ANCIENT CITY OF LEPTIS MAGNA
This great Roman centre is situated about two miles to the east of the modern town of Homs

On right—
After Homs had been occupied by the Eighth Army, a few men of a Highland Regiment explored the ruins of Leptis Magna, two miles to the east. This ancient city, formerly called Lebgy, was founded about 1000 B.C. by the Phœnicians and became an important port. Leptis was conquered in turn by the Carthaginians, Greeks, Romans and then the Garamanty, a nomad race from the interior. Reconquered by the Romans, it enjoyed a period of great prosperity around A.D. 200. An invasion by another inland race—the Asturiens—in A.D. 363 started its decline, which continued more or less steadily during an occupation by the Vandals in the fifth century and the Arabs in the seventh century. Extensive excavations were started by the Italians in 1920, and many archæological treasures have been unearthed

A ROMAN AQUEDUCT, 45 MILES LONG, NEAR TUNIS. Carthage, most famous of North African ancient cities, lies but a few miles from the modern Tunis. On every hand in this region are evidences of Roman culture and civilisation

THE RUINS OF EL DJEM, IN THE DESERT NEAR SFAX. These two places lie side by side in Northern Tunisia, and both are now in the heart of the battle area. El Djem dates back to the great days of Carthage

A FINE SPECIMEN OF EARLY AFRICAN ART: A statue of the Goddess of Victory found at Carthage, which dates back to the heroic period of Roman history

TWO PICTURES FROM THE RUINED CITY OF SBEITLA, IN CENTRAL TUNISIA, showing the remains of the great Roman temple. Sbeitla was one of a number of colonies settled by the Romans in the days of their splendour: in most cases the once-great cities are now heaps of ruins. During latter years much excavation and restoration have been carried out by the Italians on these ancient sites

PRISONERS IN AFRICA

—The Total Count from the Start

The Cairo statistical records show that nearly 500,000 captives have been taken in the Libyan, East African and Syrian campaigns, up till the arrival of the Eighth Army in Tunisia

THERE is an office in Cairo where military officials work with adding machines and ledgers, just like clerks in a London accounts department. But the figures they compute are not pounds, shillings and pence. Each cypher represents a man, or group of men, whose place of birth can usually be found in Italy or Germany, though a considerable number originate in remote African jungles and deserts. To date, those red-tabbed statisticians have counted very nearly 500,000 in this way: nearly 500,000 prisoners taken by British and Allied arms in Africa since General Wavell began his original offensive on December 9, 1940.

It can be unwise in war to strike a balance or rule off a column, and doubtless the Cairo counters would be loth even now to present a final rendering. But the advance of the Eighth Army to the borders of Tunisia, and the transfer of Cairo's leading commanders to the North African theatre, definitely marks the end of a phase. Since our handling of affairs in the Middle East has often been criticised adversely—and with good reason sometimes—it is only fair now to attempt a numerical assessment of a complete achievement.

BATTLE-WEARY GERMAN PRISONERS IN THE WESTERN DESERT: A group of untidy members of the Afrika Korps passing a knocked-out Axis tank as they begin their long journey eastwards

The situation in December 1940 was that Italy occupied vast tracts of the African continent in a semi-circle round Egypt with a total of some 450,000 men. About half these were Italian regulars; the rest were native levies and Italian second-line troops. An army of about 200,000, with a large proportion of natives, garrisoned Abyssinia, Eritrea and Italian and British Somalilands, while the other 250,000, containing a higher proportion of Italians, stood under Graziani in Tripolitania and Libya. During the next two years this great force was strengthened by the German Afrika Korps in Libya and by continual Italian reinforcements; while the attitude of Vichy France ranged a further 33,000 men against us in Syria.

It was Wavell who not only made the first inroads into the formidable mass of men round the Nile Valley, but who quickly obtained a record haul of captives for any war in Africa. By the end of his Libyan campaign he had taken no fewer than 130,000 men of Graziani's army (including nineteen generals), and when his Eritrean, Abyssinian and Somaliland campaigns were concluded he had all save a few of the East African 200,000 in his bag. The few had escaped or been killed. Never had there been such a mass surrender of troops with such a low proportion of casualties. This was largely due to the refusal of the Fascist-duped Italians to stand and fight, but one must give Wavell the credit for so planning his campaigns that the Italians eventually *had* to surrender.

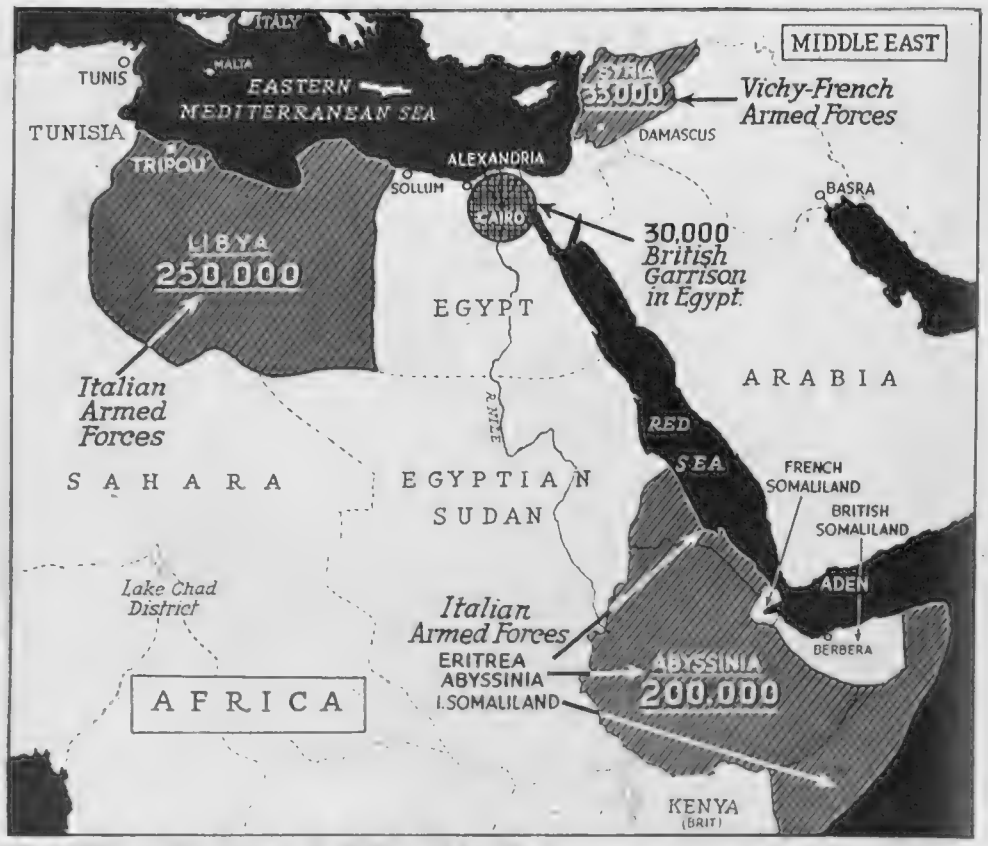
Wavell's final contribution was some 25,000 mixed French and native troops captured as a result of the Syrian campaign. His total prize was therefore about 335,000, considerably more than half the horde which originally surrounded his little Egyptian garrison of barely 30,000 Britons.

But Wavell's progress was upset by the Greek interlude and the General's transfer to India. Auchinleck assumed command in the Middle East to face a still-strong Italian force in Libya, which had been stiffened by the arrival of Rommel and his few but efficient Germans. At the end of 1941 Auchinleck attacked abortively. He took 36,500 prisoners, mostly Italians again. It was useful, but not decisive, and a few months later Rommel struck in turn. We were beaten, and thrust back to the gates of Alexandria. The prisoners taken during these dark months were mainly British and Allied. Yet Auchinleck was able to report, when he resigned his command to Alexander at the end of the summer, that he had been able to capture a further 10,000 Italians and Germans during July and August.

So when Alexander and Montgomery came to restore the situation finally, those Cairo computers had a total of some 381,500 captives on their books. There now remained just the hard core of efficient troops under Rommel, many Italians among them still, but a core that would probably be harder to "put in the bag" than all the previous hundred thousands together. However, Alexander and Montgomery made their shrewd plans, struck, and we know the rest.

When the Eighth Army reached and crossed the Tunisian border the other day, it had taken, since the beginning of the El Alamein battle, a total of approximately 80,000 men, of whom perhaps 60,000 were live captures (the exact figures have not yet been issued). Thus our African ledger column could be ruled off to indicate a seizure of some 441,500 prisoners since Wavell first moved, nearing the round figure of half a million, or the entire Axis garrison in Africa when the fight began. East Africa and Libya had been completely cleared: the remaining battle, in Tunisia, would be outside the original Middle Eastern sphere, and a triumphant, weighty Eighth Army was already chasing Rommel's last remnants into the culminating trap.

Those are the figures, so far as they can be given at present. Cairo—and the world—should be satisfied.



THE DESERT ARMY'S RECORD IN NORTH AFRICA: The position as it confronted General Wavell in 1940, after Italy's entry into the war

Just before the fall of France, when "pickings" looked so easy for jackals, Italy entered the war. And, at once, the position in North and East Africa became grave for Britain. General Wavell, then C.-in-C. Middle East, had an effective fighting force of some 30,000 men: against him there were arrayed some 250,000 Italian soldiers in Libya, another 200,000 in Abyssinia and Eritrea—to say nothing of 33,000 Vichy French troops in Syria whose attitude was problematical. Nothing daunted, however, General Wavell set about his task, moving first against the Libyan army—with what results the whole world now knows. Then, with augmented forces, he began to move against the Italian forces in Abyssinia. To-day, not a single Italian soldier remains in Libya or Abyssinia

A SCOTTISH SOLDIER ROUTING ITALIAN PRISONERS out of dug-outs in Libya. Some of the Italians were too frightened to come out after their comrades had retreated westwards, and they waited to be captured by the Eighth Army

SHOCK-HEADED AND UNTIDY GERMAN INFANTRYMEN captured during the fighting on the Russian front last autumn: In 1941 the Nazis were boasting about the perfect equipment and fine bearing of the Expeditionary Force they had just sent to Africa. Characteristic photographs even showed men sitting in deck-chairs in the desert, dressed as if for a tropical holiday, with pith helmets and goggles. Uniform was smart, hair was shorn ruthlessly in the Prussian cut. And to-day? It is a sad contrast! Perhaps the unkempt heads in the pictures of German prisoners tell the most revealing tale. The typical German soldier has noticeably deteriorated since the early days. Recent pictures provide abundant evidence that the best men have gone, and second-class troops—most of them "un-Nordic" in type—are the first-line captives of to-day. Sunken cheeks, pallor and tight lips betoken malnutrition and despondency, a feature particularly exemplified by similar pictures from the Russian front. Here the lack of warm clothing is another point, and the heavy, mud-clogged feet—the whole being hopefully reminiscent of another 1918!

FRONT-LINE WOMEN IN AFRICA

AN AMERICAN ARMY NURSE IN TUNISIA: Miss Veronica J. Eagler, who hails from New York, at her early-morning toilet outside her quarters at the U.S. Evacuation Hospital a few miles behind the front line. Jumper and slacks form a "utility" costume for the nurse whilst off duty

MISS MARGUERITE CARTER (of Quoque, Long Island), another American Army nurse, hangs out her personal garments after washing them during her off-duty hours at the U.S. Evacuation Hospital just behind the fighting line in North Africa. Note the type of Army tent in which the nurses on active service live

TWO MEMBERS OF AN ENSA SHOW IN THE DESERT: Miss Marilyn Williams and Miss Jean Black make short work of the washing up after a meal in the Western Desert

MISS ROMA MILNE, AN ACTRESS IN THE WESTERN DESERT, in the cockpit of a wrecked Italian plane. The Ensa show, "Between Ourselves," is touring places in the Western Desert farther forward than any other in the Middle East. The cast of this show includes Hugh French, manager and compère; Marilyn Williams, vocalist—and the only American entertainer in the Middle East; Jack Farr, comedian; Jean Black, dancer; Norman Hackforth, pianist; Roma Milne, soubrette; and Micky Borstein, pianist

MEMBERS OF THE ENSA SHOW, "BETWEEN OURSELVES," wander amongst the wreckage of Göring's "Luftwaffe" in Libya, where their party is now performing for the troops

THE FREEDOM OF THE AIR

The First of Two Articles Dealing with Civil Aviation After the War

By CHARLES GRAVES

THE recent speech by Congress-woman Clare Booth Luce (of which the Air Ministry secured a 5,000-word verbatim report), has brought the problem of post-war civil aviation to a head. In spite of the huge numbers of new British and American liners and cargo boats which can be expected to survive the depredations of the U-boats, there is no doubt that a British Merchant Service of the Air will have to be brought into being as quickly as possible. Discussions on both sides of the Atlantic, in the House of Commons, in the House of Lords, in Congress, in the Senate, in belligerent and neutral newspapers, are made all the keener by the indisputable and automatic fact that the United States is likely to be in a position of great aeronautical advantage over Great Britain and every other country in the world.

Even the Swiss, who produced some of the finest civilian pilots in the world before 1939, are much harassed at the prospects of the future. *Inter Avia*, the leading aeronautical journal of Switzerland, has been very blunt in its comments in the recent past. "To-day," *Inter Avia* states, "in the age of virtuous speeches and evil deeds, the time has come to draw attention to an open wound which was festering before the war, which cannot be taken care of at present, and which nobody desires to nurse. For the sake of the coming generations, for the sake of the airline captains who pioneered the commercial air services, for the sake of all those pilots who are now risking their lives at the different fronts and who will no doubt want to perform some useful work in the years to come, and for the sake of trade and business in the future, a cry of warning and an accusation must be raised.

"The great American airline, Pan-American Airways, which in the past few weeks has been conducting a publicity campaign by means of multi-coloured airline maps, accompanied by explanatory propaganda write-ups, is at least frank enough to state its ambitions. By pursuing its objectives it does justice to its comprehensible egotism and simultaneously serves the political designs of its Government. But in that case it is a little inopportune if the topmost American circles talk about access on equal terms to the trade and to the raw materials of the world, of better collaboration and social security, and, above all, of the freedom of the seas or the air space. Enough courage should be found to call a spade a spade and to confess that every advantage is to be taken of the present world situation in order to establish a powerful hegemony for the American air-carriers on the world's commercial air routes. Trade follows the flag, and Uncle Sam desires to see the Star-spangled Banner of his Clipper Boats flying on all the world's oceans and all six continents, to-day and to-morrow.

"When the American airline opened its North Atlantic service in 1939, it prepared its way by announcing a close co-operation with the British Imperial Airways, whose big name, however, rested on weak foundations. This so-called co-operation made it possible for the American company to dominate the air space over the North Atlantic without any danger of competition, for the simple reason that the British air services have not yet been able to muster sufficient energy to produce suitable flying equipment in adequate quantity by its own efforts.

"The North Atlantic air hegemony of the Americans was facilitated by the State Department in Washington, which refused to grant landing rights on the shores of the U.S.A. to the French, Germans, Dutch and Swedes, by imposing impossible conditions and, finally, by putting off tiresome applicants until a better future. The nature of that better future is known to-day."

The problems of post-war civil aviation grow more complex as they are probed. Ships cross the seas, which are free to all men, and can also enter any ports on the coasts of other countries. But if there are to be any international air routes, aeroplanes must have the right to fly over other countries' territories, or at least to some point on foreign territory. At present, neither of these rights exist, except by special concession.

The international arrangements which govern the operation of air routes are the International Air Convention of 1919 and the Pan-American Convention of 1928. Both of these recognise the doctrine that the air above a country belongs, without limits of height, to that country. Many people in this country and elsewhere favour the doctrine of the freedom of the skies. By this, aircraft would be as free to fly across all countries as ships are to navigate all oceans. A still fuller application of this would give legitimate commercial aircraft the right to land at all aerodromes, just as a ship can enter any port.

An even fuller extension of the doctrine of freedom of the skies would be the universal right to set down and take off passengers and cargo on entering a country's territory.

There is already a tendency in some quarters—fanned by Congress-woman Luce—to assume that there will be intense rivalry between the United States and Great Britain, both countries trying to obtain a position of dominance of the world's air routes. It would be most unfortunate if talk of this kind should get out of control. It is only natural that the Americans should wish to have world air services worthy of her position as a world power. It may be assumed, equally, that the Americans will realise that we are anxious not to be put in an inferior position as a result of the world war.

To-day, over 30 per cent. of the aircraft being made in American factories are transport planes. This is a gigantic figure. But it must not be regarded as a Machiavellian scheme on the part of the United States. It happens that, as no American design of fighter aircraft can stand comparison with the Mark IX Spitfire, so the Flying Fortress carries no bomb load comparable with the Lancaster, owing to the heavy turrets it carries to protect its air crew. Up to a point, therefore, the United States loses on the swings what it gains on the roundabouts.

The civilian equivalent of the Lancaster, to be known as the York, would have a dominating position as a fast cargo-carrying aircraft. On the other hand, we were compelled to buy three Boeing 14A.s to operate the Atlantic. They were sold to British Overseas Airways by Pan-American on condition that they should not be used for commercial purposes—in other words, that they should not carry a paying pay-load. Passengers were to be taken free, and no mail was to be carried. To-day, Pan-American carries the mail across the Atlantic, and the American Export Air Lines also fly the Atlantic. Unlike Pan-American, they are not subsidised and have no mail contract from the United States Government. In spite of this, however, they are making good profits by carrying passengers and freight. By the way, the fare from Foynes to the United States via Lisbon is 797 dollars, plus £11 10s for the trip to Foynes from some British aerodrome.

Our trio of Boeing 14A.s are used primarily for flying between West Africa and this country. Once every three weeks, however, each aircraft has to cross the Atlantic for maintenance purposes at Baltimore, where spares are easily obtainable.

British Overseas Airways, as I have pointed out previously in THE SPHERE, is a public non-profit-making concern; or, to be strictly correct, its stock bears a fixed rate of interest of 2½ per cent. guaranteed by the Government. Will British Overseas Airways have a monopoly after the war? Unless some young Beaverbrook can be found to handle the organisation, it would seem that the task of directing a huge Merchant Air Service operating all over the world might be too much for any one concern. In any event, a further question arises. What is the relationship to be between air transport and shipping? Already the Cunard, the Orient and the P. and O. have expressed interest in this matter.

Canada is as anxious as Great Britain about the future of civil aviation, and with some justification. In the latest issue of *Commercial Aviation*, Canada's foremost aeronautical publication, there is an editorial pointing out that in the pre-war period an agreement was drawn up between Canada and the United States—"Arrangement relating to air-transport services between Canada and the United States of America." In this it states: "Each Party further agrees, subject to compliance with its laws and regulations and on a basis of reciprocity, to grant operating rights to the air-carrier enterprises of the other Party for the operation of international services between a place in the territory of one Party and a place in the territory of the other Party."

The practical expression of this reciprocal agreement is that, of the ten licences now in force for international services between Canada and the United States (including Alaska), nine have been given to U.S. air-carrier companies. "Surely there is something wrong with so-called reciprocity that calls for a 90 per cent.-10 per cent. division of opportunity," says this editorial. "On the face of it there appears to have been a drastic infringement of the rights and privileges of Canadian operating companies. What chance do they stand of obtaining redress or making a reasonable adjustment in the mad scramble after the war? Past experience of individual and collective psychology has taught us that, no matter what might have been previously said and meant at the time, only the actual fact of possession determines right."

The Swiss, at the other end of the world, raise a similar query. Is it to be assumed, they ask, that Pan-American Airways will of its own accord withdraw from its conquests after the war? The South Atlantic air service was pioneered by the French, then expanded by the adoption of Franco-German co-operation. Later the service was maintained by the Italians. Then came Pan-American Airways, in the autumn of the second year of the war in Europe, and installed itself on the South Atlantic, operating from Lisbon to Brazil, Trinidad, the Caribbean, Miami and New York. It cannot be surprising, the Swiss conclude, that in view of the Americans' hunger for bases, "which far outmatches the British appetite of the past decades, that the French are worrying about Dakar, Portugal about Cape Verde Islands and the Azores, and Spain about the Canary Islands."

(The second, and concluding, article will be published in next week's issue)

AN UNUSUAL SIGHT AT A MARINE TERMINAL AIRPORT OF BRITISH OVERSEAS AIRWAYS. Five big flying-boats are at their moorings waiting to start their flights to the United States and West Africa. Shown in this picture are three Boeings, a "G" class flying-boat, and a Catalina

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export

WAR NEWS ITEMS in PICTURES

THE MALTA FIGHTER-CONTROL GIRLS KEEP FIT. After long hours in the underground rock shelters in which Fighter-Control Headquarters are located, fresh air and exercise are essential. After the fighters have returned, the girls get into bathing-suits and practise dance routines on the roof of a house belonging to their captain

THE CHILDREN OF MALTA attend the ceremony of Blessing the Animals outside the Church of Victoria. This ceremony was postponed during the blitz period: despite all they have endured, in blitz and siege, it will be observed that the Island's children are still quite happy and healthy!

TWO PICTURES FROM AN R.A.F. STATION IN ENGLAND: Men of the Works Services preparing a portable runway made out of wire netting; by means of this improvised runway, which can be laid down and pegged into position very quickly, aircraft can take off and land in all weathers and on all conditions of ground. Similar runways are being used in Africa and in other theatres of war for operational flying

A DESTROYER'S FALSE BOW FOR A 2,000-MILE JOURNEY TO THE SHIPBUILDER'S YARD: The old four-funnelled U.S. destroyer *Blakeley* is here seen in the Philadelphia Navy Yard after a 2,000-mile journey from the Caribbean Sea with a false bow (similar to that fitted to the U.S.S. *Shaw*, which went back to the mainland for repairs after the attack on Pearl Harbour). The *Blakeley* had her bow completely blown to bits by an Axis submarine; but she managed to make a Caribbean port, where the false one was substituted. In Philadelphia, the bow from a sister-ship—the *Taylor*, now out of commission—was grafted on, and the *Blakeley* is once again on the high seas

A DESTROYER SECTION ARRIVES AT THE SHIPYARD: This 40-ft. section weighs 80,000 lb.; it has been built up in sections, and is here seen upon arrival at an American slipway. Using such methods, a record has been established by this shipyard for building more destroyers, and more quickly, than any other U.S. naval yard

The World of Books—By Vernon Fane

A SELECTION OF FACT AND FICTION

Mr. Frank Fenton's Vigorous Novel; A Chatterton Biography; A Romantic Story by Miss Naomi Royde Smith; Tips About Tots; Mr. Gerald Kersh's Exposition of Nazi Horrors; A New Series of "Live Books"

AMONG the American masters of the brief phrase or the rolling Biblical period, I have found a name that is new to me, in Mr. Frank Fenton, whose A PLACE IN THE SUN (Heinemann. 9s. 6d.) is decidedly the novel of the week. There is a vigour and spirit about the technique of his writing that is purely American, and, in some moods, almost too exuberant. But it is authentic, even at its most wordy, and even at its most reminiscent.

A DEAF AND DUMB PAINTER AS AN OFFICIAL WAR ARTIST: Mr. A. R. Thompson has been deaf and dumb since birth. Previously, he was one of the war artists appointed by the War Artists' Advisory Committee to paint portraits of distinguished Civil and Service leaders for the nation. Now he has been appointed an official war artist for the Royal Air Force. Before the outbreak of hostilities, Mr. Thompson had acquired a great reputation as a commercial artist: he is entirely self-taught, and has never had a lesson. Above he is seen in his studio working on an R.A.F. mess scene for the Air Ministry

The story is of a crippled boy who moves out to California from Ohio, with a few hundred dollars and an old flivver. The money is only enough to last him for a little while he looks round for some kind of work at which he could be competent. That at least is the idea, but in practice it works a little differently.

The sun and the easy living, and the finding of a friend and of a girl make up his life; an existence in which there seems no time and no necessity for work. When the girl commits suicide over another man, and it seems that he is implicated, his brother comes out from Ohio and brings him back. He finds a job that will suit him, as a solitary watchman, and the story closes with his rediscovery of his childhood sweetheart.

A simple enough theme of which anything—or nothing—could be made. What Mr. Fenton has made of it is something memorable, and something which has been a delight to read.

SAVE ALL YOUR WASTE PAPER FOR SALVAGE

Wordsworth called him "The Marvellous Boy, the sleepless soul that perished in his pride." Byron ranked him with Burns; and Scott hailed him as a master. Keats inscribed "Endymion" to him, and declared him the "purest writer in the English language." Rossetti wrote of him: "He was as great as any English poet whatever, and might absolutely, had he lived, have proved the only man in England's theatre of imagination who could have bandied parts with Shakespeare."

And who was he? The marvellous boy of Bristol, Thomas Chatterton, who died before he was eighteen, in 1770, and whose reputation as a poet is as brilliant as any in English letters.

Mr. Neil Bell's biography, COVER HIS FACE (Collins. 9s. 6d.), is written in novel form, which has given the author a certain licence and freedom to theorise. He describes it himself as a new reading of the Boy's life, and is at pains to prove in it that the slur of suicide should never be attached to Chatterton's name. Mr. Bell's admiration, even reverence for the poet, is unbounded, and informs every page of this full and vivid book

Miss Naomi Royde Smith's new novel is a romantic tale in which music, forlorn love-affairs, and lake-sides of a Swiss character take the honours, in that order of importance. MILDENSEE (Macmillan. 8s. 6d.) is nostalgic, charming and rather colourless. Because it comes from the practised pen of one who regards writing as a skilled craft, and not as a spare-time diversion, the book is readable to a degree, and has that pleasant ease of expression that one expects from this writer.

But Gillian, the central character, the girl who is to become the world-famous violinist, is a curiously bloodless creation, and never provokes more than a tepid interest from the reader. Gillian is excellent material for the politely Svengaliesque machinations of her husband, and she is adept at accepting tuition, homage, schedules of work, fabulous presents, and more plans for work. But as a giver of anything but sweet music, Gillian is a dead loss, and that, even in the pages of a romantic novel, tends to make her unreal.

Even falling in love fails to shatter her calm, beyond a fainting spell or two, and Gillian, at sixty-odd, fingering her faded *billets doux*, has the same absence of passion that made her so cool and even, let it be breathed, so dull a girl.

IT PAYS TO BE WISE (John Crowther. 8s. 6d.), in spite of its forbidding title, is both an enchanting and an intelligent little book about babies, which I would consider it my duty to send to young mothers if I had any among my acquaintance.

Mrs. Powell-Jones has an approach to the problem of very small babies—and I am given to understand that there are certain problems there—that not only a mother, a father, or an indulgent uncle might appreciate, but that a nannie would positively relish.

Her sensible and friendly little book is designed for young, and therefore inexperienced, mothers, who are either lucky enough to be acquiring their first nannie, or must plan for the first months on their own. I have consulted experts on the subject, and I am told that there is everything in this cradle-sized volume, from designs for woolly pants to tips about temperaments. Both subjects, I am informed with authority, are more than adequately dealt with.

Mr. Gerald Kersh's novels to date have been concerned with a number of characters—to me unforgettable—in one of the Guards regiments. They were tough, and they were living, and they expressed, as no one in this war has better expressed it, the essential fibre of the British soldier.

Mr. Kersh's new novel has a very different theme. THE DEAD LOOK ON (Heinemann. 7s. 6d.) has been dedicated "to the murdered men of Lidice, and their memory; and to their women and children who are worse than dead. To the fighting spirit of all those who live and hope for freedom."

The story itself, a short one, is recognisably that of a Czech village in which, as a reprisal for the shooting of a German official, all the men were murdered, the women sent to labour or concentration camps and their children sent alone to "schools" in Nazi territory.

It makes almost unbearable reading, and I mean that in the exact sense of the words. Such horror, such ingenious cruelty and, more than all, such utter, utter desolation, are hard for the human mind to comprehend. What the Nazi conscience comprehends in this matter is something else again.

Two of an excellent series, published by Messrs. Collins this week, are ENGLISH CITIES AND SMALL TOWNS, by Mr. John Betjeman, and BRITISH CRAFTSMEN, by Mr. Thomas Hennell, each at 4s. 6d. These little books are well produced and illustrated, each with several plates in colour, but, aside from their technical merits, they have their own charm, and are, in spite of the necessarily superficial treatment of their subjects imposed by the length, well worth scrutiny.

THE MEMOIRS OF ROBERT-HOUDIN (Werner Laurie. 7s. 6d.) constitute one volume in a series of reprints edited by Mr. Stanley Jast, which have the laudable and expressed intention of "resurrecting live books."

M. Robert-Houdin's memoirs were first published in 1859, but his satisfaction and *élan* are as lively to-day as then, and the chapter headings that he himself gave to his reminiscences are some indication of this. "My first mechanical attempts—Had I but a rat—An action more ingenious than delicate—Pitying protest of the harem—I return home—The Canary Rewarded—Way to get rid of bores—Publicity in England—The Colchester public and the Nuts"; and so on, although perhaps not given here in their strict order, are an indication of pleasures in store for the Persistent Reader.

THE 1943 EDITION OF WHITAKER'S ALMANACK

Once again this indispensable work of reference has made its welcome appearance. A point of interest in this seventy-fifth annual volume is the increase in space needed for Government and Public Offices. In the first issue of *Whitaker's*, in the year 1869, these required only 8 pages. In 1939 they occupied 80 pages, and in the present edition the space is extended to 101 pages. There is also included a comprehensive Diary of the War with its setbacks and advances, and, in response to many requests, the item, "Government by Party," which appeared in the 1932 edition, is reprinted with an extension covering the period which has since elapsed.

Some idea of the scope of the new *Whitaker* can be gained from the fact that the index takes up no fewer than 80 pages and contains upwards of 30,000 references.

There are again the usual three editions. A leather-bound library edition at 21s. net; the Complete Edition, cloth-bound, at 10s. net; and the Shorter Edition, containing only the first 704 pages of the full book, paper bound, at 6s. net.

A MONASTERY POTTERY—Choir Monk Dom Basil Robinson at work on devotional figures in the Monastery at Prinknash: Terra-cotta pottery has now been added to the many industries carried out by the monks at Prinknash Monastery, near Gloucester. The discovery of very fine quality clay during excavations for the new Abbey which the Brethren are building led to this development, which is in charge of Choir Monk Dom Basil Robinson, who studied sculpture and pottery at the Royal College of Art

The Shaftesbury Homes and "Arethusa" Training Ship

The Society has heard of a number of old boys who are prisoners of war, and is arranging to send parcels of technical books which will help these old boys in their professions after the war. These books are expensive. Gifts will be welcome at the Society's address: 164, Shaftesbury Avenue, London, W.C.2.

See its sparkling clearness as it bubbles in your glass. Take a deep draught. How clean and crisp it is on the tongue. Could you have believed that water could taste so satisfying?

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This is a message of grateful acknowledgement to the Royal Navy, the Merchant Navy, and all those who go down to the sea in ships; for the risks they run in bringing their precious cargoes to these shores. Once here it is our bounden duty to see that they are not wasted.

Amongst the thousands of tons of goods daily pouring into the country, Timber has its rightful place. This, then, is a message to all those who must use timber for the repair of houses, the construction of sheds, huts, fencing, etc. "All timber must be protected with the best wood preservative available." Solignum Wood Preservative has been meeting this need all over the world for over 40 years. Government requirements make a heavy demand on our resources, and will continue to do so until the end of the war, but Solignum is still available for essential purposes.

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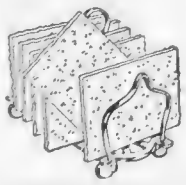

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When I was quite young I remember using it, but later I tried other various dentifrices. For the last 12 years or so, however, I have been using Eucryl only, because nothing else keeps my teeth so white and clean. As a professional nurse I appreciate its antiseptic and refreshing qualities.

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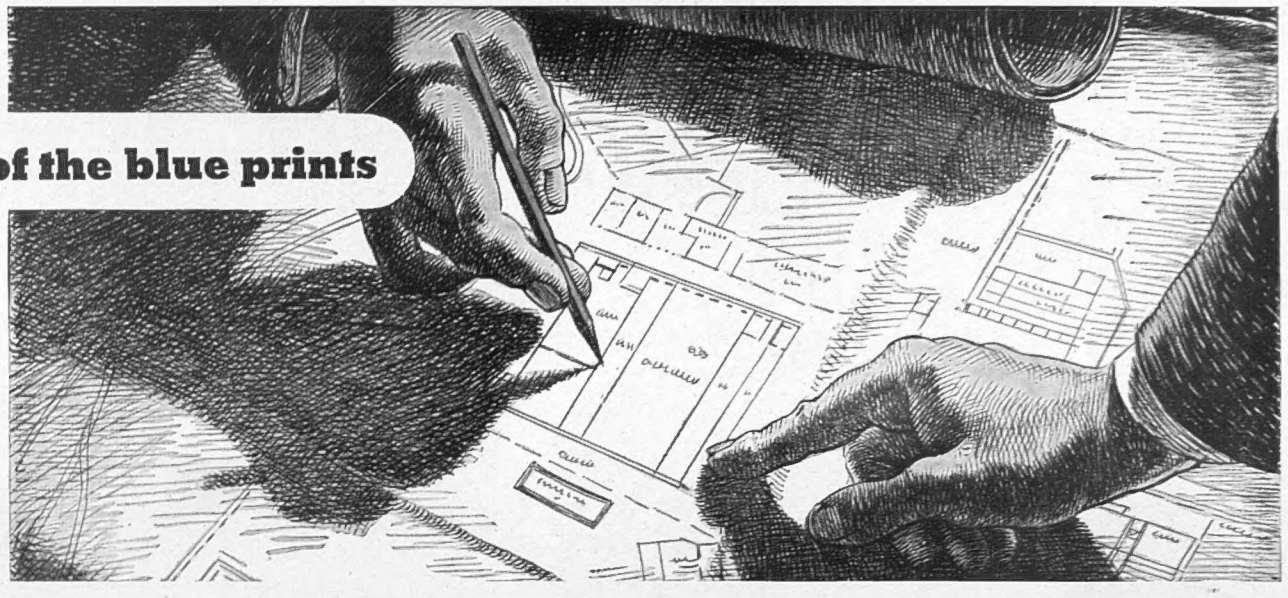

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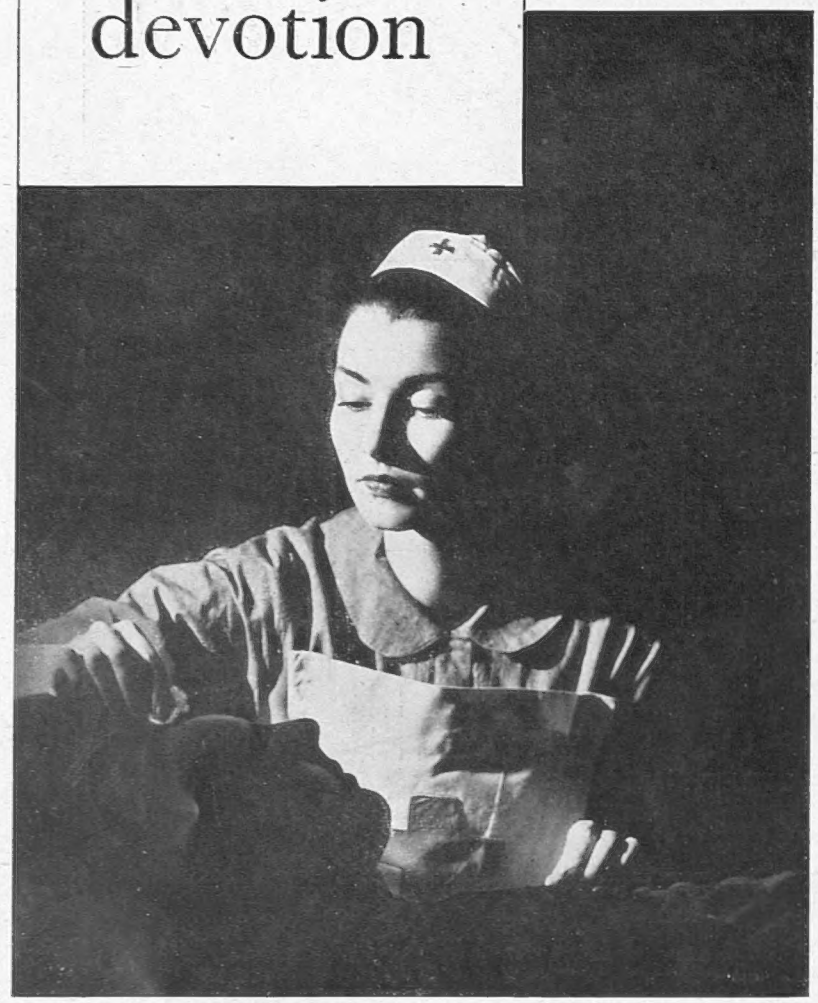

Her war goes on through most of the day and night; her war with pain, disease and death. Her war has brought her into danger, hardship, and seldom-ceasing work. She is of the mettle of which heroines are made.... Few of us have got the qualities to make a nursing sister of the battle-field. But we *have* all got more grit and more courage than we know! This is the spirit that is drawing Victory within our grasp. This is the glory of our nation — that in the time to come men will say: "*But for their heroic devotion . . . ?*"

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★ The strain of wartime traffic is very great. Cable and Wireless is now handling more than 1½ million words a day in its unceasing service. With this, and the loss of its main Far Eastern routes, it is not always possible to give the same service as in peace time, but the Company and its Staff are doing all that is humanly possible.

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—but for YOU!

Most of our men in enemy prison camps have already spent two-and-a-half years in captivity, and are suffering badly from the strain and monotony of prolonged confinement. We beg all readers of THE SPHERE to help us in our work of cheering these men. Each parcel we send is individually packed and addressed, and will give enormous pleasure to some lonely prisoner who might otherwise be overlooked. £5 will send regular parcels and cigarettes for a year—larger sums proportionately.

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NAME.....
ADDRESS.....

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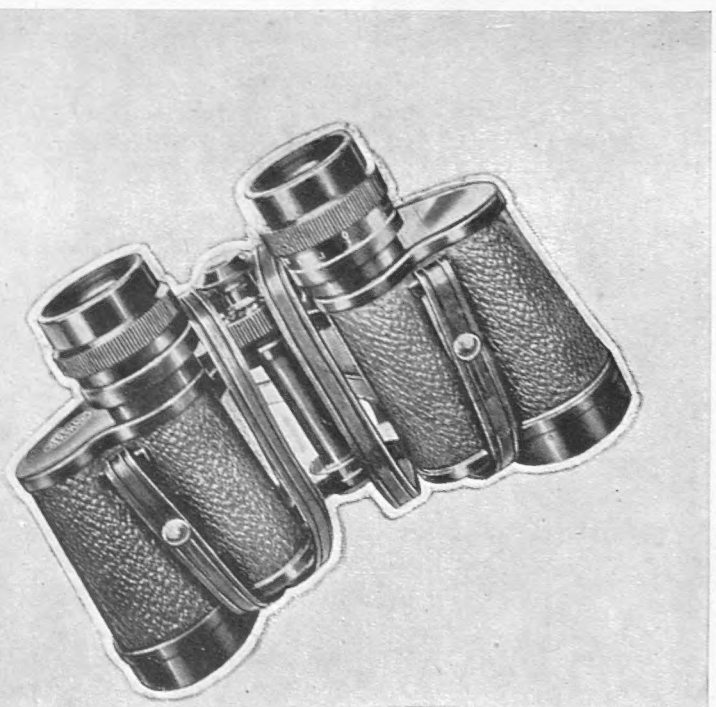

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